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Registered as a Newspaper.
Published Weekly at 42 CANNON STREET,
LONDON. E.C.

TELEGRAPHIC ADDRESS:
"CHEMICUS CANNON LONDON."

**Established in
[AUSTRALASIA, 1885.]**

No. 1,704. Vol. LXXXI.

SEPTEMBER 21, 1912.

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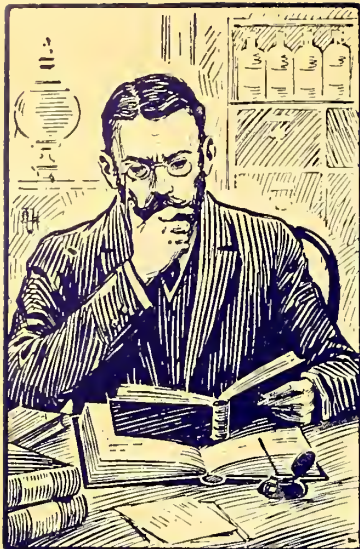
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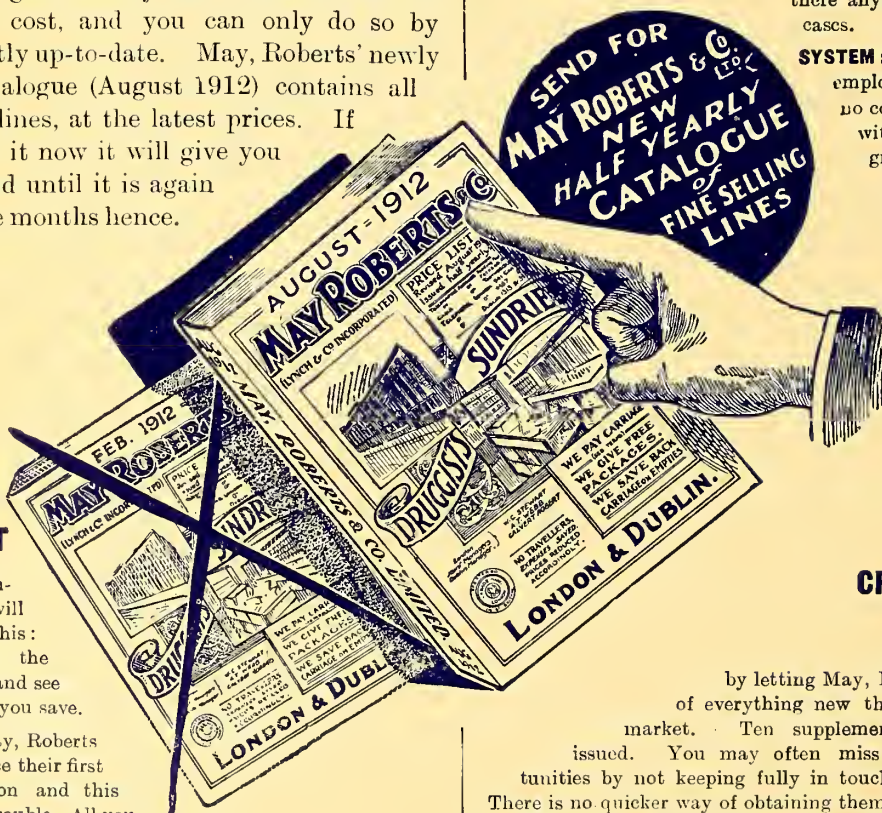
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The
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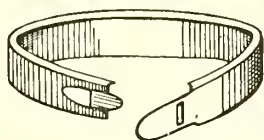
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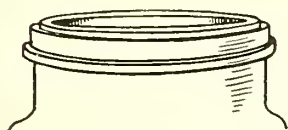
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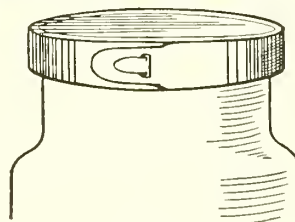


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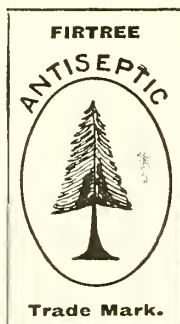
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&c. &c.

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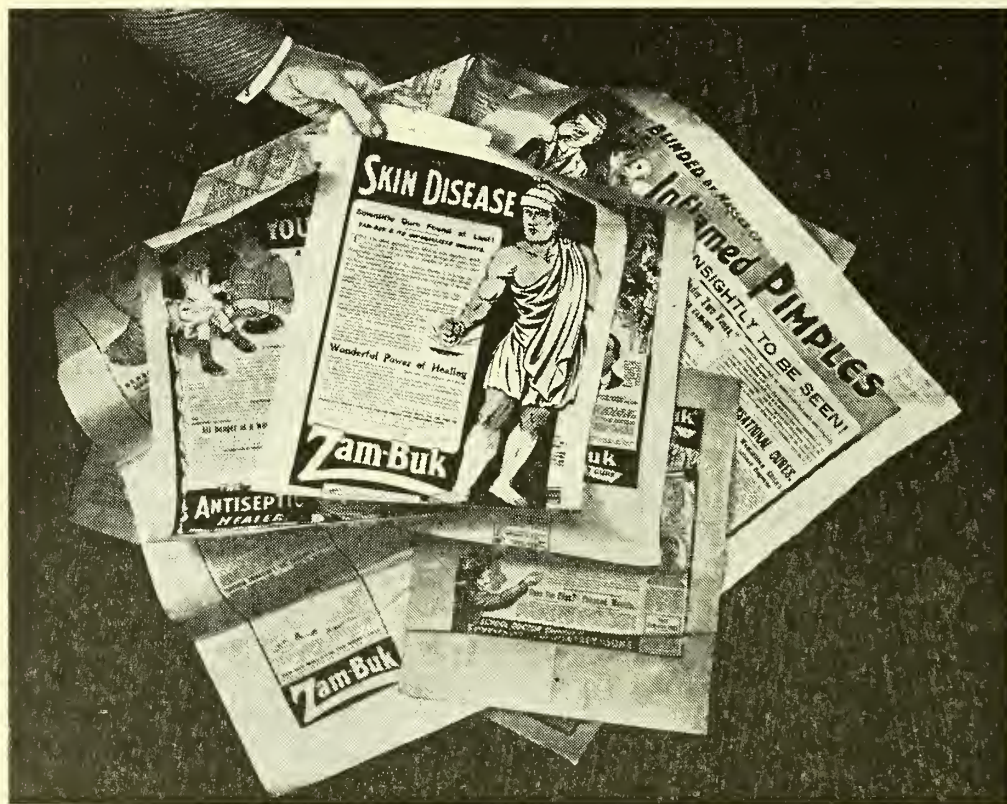
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THE BUYERS' GUIDE.

In this section, under appropriate headings, are given the names of firms advertising in this or other issues of the month. No charge is made to advertisers for the insertion of their names, but only those who have contracts current for advertising in this journal are mentioned. The headings refer generally to the classes of goods actually advertised, but this is not a detailed Guide such as appears in "The Chemists' and Druggists' Diary." Inquiries addressed to the "Information Department," THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C., regarding articles not appearing in these pages receive prompt attention, as shown weekly in the editorial pages.

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Burroughs Wellcome & Co.
Bush, W. J., & Co., Ltd.
Duncan, Flockhart & Co.
Macfarlane, J. F., & Co.
May & Baker, Ltd.
Smith, T. H., Ltd.

CIGARS AND CIGARETTES

Singleton & Cole, Ltd.

CITRIC ACID AND CITRATES

British Drug Houses, Ltd., The
Burgoyne, Burbidges & Co.
Howards & Sons, Ltd.
Sturge, John & E., Ltd.

CLINICAL THERMOMETERS

Burge, Warren & Ridgley, Ltd.
Maw, S., Son & Sons
Perken, Son & Co., Ltd.
Powell, J. T., & Co.
Raphael's, Ltd.
Zeal, G. H.

CLOTH BALLS

Senior, Alf., & Co.
Zetts, O'Neill, & Co.

COAL TAR SPECIALITIES

Wright, Layman & Umney, Ltd.

COCKROACH PASTE

Howarth & Fair

COCOA

Cadbury Bros., Ltd.

COD LIVER OIL

British Drug Houses, Ltd., The
Charity, W., & Sons
Evans Sons Lescher & Webb, Ltd.
Lorimer Marshall, Ltd.
Sparks, White & Co., Ltd.
Wright, Layman & Umney, Ltd.

COLD CREAM

Barnetts Perfumery, Ltd.

COLLAPSIBLE TUBES

Betts & Co.

COMBS

Hovenden, R., & Sons, Ltd.

COMPLEXION SPECIALITIES

Rubinstein, Madame H.

CONDENSERS

Bennett, Sons & Shears, Ltd.

CONFECTIONERY COLOURS

Bush, W. J., & Co., Ltd.

CONTINENTAL PROPS.

Wilcox, Joseau & Co.

COPPERSMITHS

Braithwaite, H., & Co.

CORKS

Mitchell, N. W., & Sons, Ltd.

CORN EXTERMINATOR

Gardner

CORN PLASTERS

Solport Bros.

COUNTER ADJUNCTS

Evans Sons Lescher & Webb, Ltd.

COUNTER SPECIALITIES

Allen & Hanburys, Ltd.
British Drug Houses, Ltd., The
Hewlett, C. J., & Sons, Ltd.
Wright, Layman & Umney, Ltd.

COURT PLASTER

Solport Bros.
Pharm. Ind. Ges. Offenbach

CREOSOTE

Baiss Bros. & Stevenson, Ltd.
Burt, Boulton & Haywood, Ltd.

CREPE BANDAGES

Burge, Warren & Ridgley, Ltd.
Gimber, W., & Son
Leslies, Ltd.
Norwich Crêpe Co. (1856), Ltd.
Wood, Vincent

CYANIDES

May & Baker, Ltd.

DAIRY SPECIALITIES

Fullwood, R. J., & Bland
Oldfield, Pattinson & Co.

DECOCTIONS, &c., CONCENT

Wyleys, Ltd.

DENTAL MECHANICS

Cullwick, H. E.
Fentiman, A. G.
Fentiman, A. J., & Co.
Garthwaite, H.
Halder, E. C.
Wardale, F. C., & Co.

DENTAL TOOLS, ETC.

Plucknett, C. J., & Co., Ltd.

DENTIFRICES

Beecham, T.
Bell (John), Hills & Lucas, Ltd.
Blackie, Robert
Calvert, F. C., & Co.
Christy, T., & Co.
Cook, B. & Co., Ltd.
Enoryl, Ltd.
Jewsbury & Brown
John Strange Winter
Mason Bros. & Chapman
Maw, S., Son & Sons
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Parke, Davis & Co.
Reidel, J. D., & Co.
Sangers
Standard Tablet & Pill Co., Ltd.
Woolley, J., Sons & Co., Ltd.

DEVELOPERS (PHOTO)

Evans Sons Lescher & Webb, Ltd.
Express Developing Co.
Johnson & Sons (Mfg. Chts.)

DEXTRINE

Fink, F., & Co.

DIABETIC FOODS

Van Abbot, G., & Sons

DISINFECTANTS

Baiss Bros. & Stevenson, Ltd.
Burt, Boulton & Haywood, Ltd.
Calvert, F. C., & Co.
Condy & Mitchell, Ltd.
Cook, E., & Co., Ltd.
Ellison, Henry, Ltd.
Sanitas Co., Ltd.
Willows, Francis B. & T.
Wright, Layman & Umney, Ltd.

DISINTEGRATORS

Hardy Patent Pick Co., Ltd.

DRUGGISTS' SUNDRIES

Ayrton, Saunders & Co., Ltd.
Barclay & Sons, Ltd.
Berliner, Arthur
Burge, Warren & Ridgley, Ltd.
Bush, H. W., & Co., Ltd.
Christy & Co.
Edwards, W., & Son
Evans Sons Lescher & Webb, Ltd.
Hovenden, R., & Sons, Ltd.
Manson, R.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Poths, H., & Co.
Qneloh, H. C., & Co.
Renter, R. J.
Sangers
Schutze, F., & Co., Ltd.
Solport Bros.
Swales, Thomas
Toogood, W., Ltd.
Wattenbach, O.
Woolley, J., Sons & Co., Ltd.

DRUGS, CRUDE

Brook, Parker & Co., Ltd.
Gathergood's Exor.
Goodhall, Backhouse & Co.
Parkinson-Worswick, J.
Potter & Clarke, Ltd.
Ransom, W., & Son
Schmitt & Wildenhayn
Sparks, White & Co., Ltd.

DYEWARES

Clemons, Marshall & Garbert

EAU DE COLOGNE

Farina, J. M.
Farina, J. M. (No. 4)
Fickus, Courtney & Co.
McCracken, J. & R.
Reuter, R. J.
Schutze, F., & Co., Ltd.
Spurway and Cie.

EDUCATIONAL INSTITS.

Bath & West of England College
Birmingham & Midland College
City of London College
College of Preceptors
Eli's College
Glasgow School of Pharmacy
Liverpool School of Pharmacy
London College of Pharmacy
North of England School
Northern College of Pharmacy
School of Pharmacy
South of England College
University of Bristol
West Ham Technical Institute
Westminster College

EFFERVESCENT PREPS.

Allen & Hanburys, Ltd.
Bishop, Alfred, Ltd.
Bristol-Myers Co.
Cupal, Ltd.
Guest, Thos., & Co.
Wright, Layman & Umney, Ltd.
Wyleys, Ltd.

ELASTIC HOSIERY

Ayrton, Saunders & Co., Ltd.
Burge, Warren & Ridgley, Ltd.
Haywood, J. H., Ltd.
Maw, S., Son & Sons
Surgical Hosiery Co., Ltd.
Wood, Vincent

ELECTRICAL NOVELTIES

Millard Bros., Ltd.
Ward & Goldstone

EMERY AND CLOTH

Oakey, J., & Son, Ltd.

EMETINE SALTS

Whiffen & Sons, Ltd.

EMULSIFIERS

Bennett, Sons & Shears, Ltd.
Wilkinson, S. W., & Co.

EMULSIONS, C. L. O., &c.

Ayrton, Saunders & Co., Ltd.
Baiss Bros. & Stevenson, Ltd.
Boulton Macro, Ltd.
Burgoyne, Burbidges & Co.
Cupal, Ltd.
Lorimer Marshall, Ltd.
Stevenson, H. E., & Co.

ENEMAS

Burge, Warren & Ridgley, Ltd.
Ingram, J. G., & Son
Maw, S., Son & Sons
Newbery, F., & Sons, Ltd.
Warne, W., & Co., Ltd.

ESSENCES, SOL. AND FRUIT

Alliance Drug & Chem. Co.
Barnett & Foster
Boake Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
Hay, Wm., Ltd.
London Essence Co.
Newball & Mason
Stevenson & Howell, Ltd.
Stevenson, H. E., & Co.

ESSENCES, CONCRETE

Spurway et Cie.

ETHERS

Baiza Bros. & Stevenson, Ltd.
Duncan, Flockhart & Co.
Howards & Sons, Ltd.
Macfarlan, J. F., & Co.
May & Barker, Ltd.
Tyrer, T., & Co., Ltd.
White, A., & Sons

EUCALYPTUS OIL

British Drug Houses, Ltd., The

EXTRACT OF HERBS

Newball & Mason
Potter & Clarke, Ltd.

EXTRACTS (MEDICINAL)

Allen, Stafford & Sons, Ltd.
Burroughs, Wellcome & Co.
Evans Sons Lescher & Webb, Ltd.
Gathergoods Exor.
Hewlett, C. J., & Son, Ltd.
Parke, Davis & Co.
Ransom, W., & Son

FACTORY, &c., SITES

Great Western Railway
North-Eastern Railway

FILTER PAPER

Burgoyne, Burbidges & Co.

FILTERS

Berkefeld Filter Co., Ltd.

FLYCATCHERS

Alabastine Co. (British), Ltd.
Barracough, J., & Co.
Smith, Jno. H., & Co.
Strong, Christy
Tunbridge & Wright

FOODS, INVALID, ETC.

Allen & Hanbury's, Ltd.
Ball (John), Hills & Lucas, Ltd.
Benger's Food, Ltd.
Brand & Co., Ltd.
Burgoyne, Burbidges & Co.
Cox, Arthur H., & Co., Ltd.
Deans, Logan & Co., Ltd.
Fairchild Bros. & Foster
Horlick's Malted Milk Co.
"Lemco and Oxo"
Lofthouse & Saltmer, Ltd.
Menley & James, Ltd.
Natural Food Co., Ltd.
Willows, Francis, B. & T.
Woolley, Jas. Sons & Co., Ltd.

FULLER'S EARTH

Mumford, G. S., & Sons

FUMIGATORS

Sanitas Co., Ltd.

GLYCERIN

Price's Patent Candle Co., Ltd.

GLYCEROPHOSPHATES

Merck, E.
Pointet & Girard

GREASE REMOVER

Perkin & Co., Ltd.

GRINDERS, DRUG, &c.

Allen, Stafford & Sons, Ltd.
Goodall, Backhouse & Co.
Willows, Francis, B. & T.
Wright, Layman & Umney, Ltd.

GRINDERS (MACHINE)

Hardy Patent Pick Co., Ltd.

GUMS

Fink, F., & Co.
Kidston, W. M., & Co.

HAIR DYES

Marker, Stagg & Morgan, Ltd.

HAND-CARTS, TRUCKS, &c.

Orewe & Co.

HAIR PREPARATIONS:

Aironal, Ltd.
Alexandre, L.
Blackie, Robert
Edwards' "Harlene" Co.
Harrison, G. W.
John Strange Winter
Nyto Preps, Ltd.
Osborne, Garrett & Co.
Robare's Aureoline
Saunders, J. Tozeau, Ltd.
Van Essen, James & Co., Ltd.
Warner Oliver, Ltd.

HAT CLEANERS

Christy, Thos., & Co.
Senior, Alf., & Co.

HAT DYES

Whitaker & Co.

HEARING APPARATUS

Steels Electrophone Co., Ltd.

HERBS

Brook, Parker & Co., Ltd.
Potter & Clarke, Ltd.
Ransom, W., & Son

HOMOEOPATHIC MEDICINES

Ashton & Parsons, Ltd.
Keene & Ashwell, Ltd.

HOT-WATER BOTTLES

Burge, Warren & Ridgley, Ltd.
Dunlop Rubber Co., Ltd.
Fulham Pottery and Cheavin
Filter Co., Ltd.
Galen Manfg. Co., Ltd.
India Rubber, Gutta-percha &
Telegraph Works Co., Ltd.
North British Rubber Co., Ltd.
Tompkins, J., Ltd.
Wood, Vincent
X. L. Rubber Co.

HOTELS

Kingsley Hotel
Thackeray Hotel

HYDROGEN PEROXIDE

May & Baker, Ltd.
Sanitas Co., Ltd.
Tyrer, T., & Co., Ltd.

HYPOPHOSPHITES

May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

ICHTHYOL

Ichthyol Gesellschaft

INHALERS

Oxo Medicated Air Co., Ltd.

INSECTICIDES

Christy, T., & Co.
Nyto Preparations, Ltd.
Tomlinson & Hayward, Ltd.

INSECT PENCILS

Chaline & Co.

INSECT POWDER

Danysa Virus, Ltd.
Keating, Thomas

INSTEP SUPPORTS

Pond, H. J.
Scholl Manfg. Co.

JUJUBES

Guest, Thos., & Co.
Potter & Clarke Ltd.

LACTOBACILLINE

Société "Le Ferment."

LANOLINE

Burroughs Wellcome & Co.

LARD

Ewen, J., & Sons

LAVENDER WATER.

Bush, W. J., & Co., Ltd.
Rivers, Hill & Co., Ltd.

LEATHER BLACK

Whitaker & Co.

LECITHIN

Chem. Works "Victoria"
Williams, G. M., & Co., Ltd.

LETTER FILES

Eeles, Walker & Co.

LIME JUICE AND CORDIAL

Evans Sons Lescher & Webb, Ltd.
Goodall, Backhouse & Co.
Idris & Co., Ltd.

LINSEED, CRUSHED, &c.

Mumford, G. S., & Sons

LINTS

Liverpool Lint Co.
Maw, S., Son & Sons
Robinson & Sons, Ltd.
Taylor, W. J.
Vernon & Co., Ltd.

LIQUORICE JUICE

Apollo
Evans Sons Lescher & Webb, Ltd.
Jackson, E. E.
Mumford, G. S., & Sons
Solazzi

LITHIA SALTS

British Drug Houses, Ltd., The
Macfarlan, J. F., & Co.
May & Baker, Ltd.

LOOFABS

Internal. Sponge Importers, Ltd.
Solport Bros.
Swales, Thomas

LOZENGES

Ayrton, Saunders & Co., Ltd.
Guest, Thos., & Co.
Jackson, E. E.
Potter & Clarke, Ltd.
Raines & Co.
Standard Tablet & Pill Co., Ltd.
Warwick Bros.

MACHINERY, PHARMACAL

Allea & Hanbury's, Ltd.
Bennett, Sons & Shears, Ltd.
Comet Chemical Co., Ltd.
Gardner, Wm., & Sons, Ltd.
Hardy Patent Pick Co., Ltd.
Lister, R. A., & Co., Ltd.
Findar, J. W., & Co.
Stokes, F. J., Machine Co.
Wilkinson, S. W., & Co.

MAGNESIA AND ITS PREPS.

British Drug Houses, Ltd., The
Corbyn, Stacey & Co., Ltd.
Henry, T. & W.
Howards & Sons, Ltd.
Phillips, Chas. H., Chem. Co.
Washington Chemical Co., Ltd.

MALT EXTRACT & PREPS.

Boulton, Macro, Ltd.
British Diamalt Co., Ltd.
British Drug Houses, Ltd., The
Burroughs Wellcome & Co.
Davies, Sons & Co.
Evans Sons Lescher & Webb, Ltd.
Paine & Co., Ltd.

MANICURE CASES

Hovenden, R., & Sons, Ltd.

MARKING INK

John Bond ("Crystal Palace")

MEAT EXTRACTS

Armour & Co., Ltd.
Bovril, Ltd.
Brand & Co., Ltd.
"Lemco and Oxo"
Tooth's Extract of Meat Co.

MERCURIALS

Alliance Drug & Chem. Co.
Howards & Sons, Ltd.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

METAL GOODS

Betts & Co., Ltd.
Eley Bros., Ltd.

METHYLATED SPIRIT

Burrough, J., Ltd.
Macnair, A. & Co.
Preston's Liverpool Distillery
Randall & Son, Ltd.

MICROSCOPES

Raphael's, Ltd.

MILK POWDER

West Surrey Central Dairy Co.
Ltd.

MINERAL WATERS, SALTS

Apollinaris Co., Ltd.
Hughes, E., Griffiths
Ingram & Royle, Ltd.
Vichy (State Springs)
Vittel

MIXERS AND SIFTERS

Comet Chemical Co., Ltd.
Gardner, Wm. & Sons (Gloucester), Ltd.

MUSTARD PLASTER

Rueff, Julius

NIGHT-LIGHTS

Prescott & Co.

OINTMENTS

Blackie, Robert
Burgess, E.
Calvert, F. C., & Co.
Cartwright, W. B., Ltd.
Cox, Arthur H. & Co.
Oldfield, Pattinson & Co.
Peat Products (Sphagnol), Ltd.
Smith, Maurice.
Zimmermann, Chas., & Co.

OILS, ESSENTIAL

Allen, Stafford & Sons, Ltd.
Alliance Drug & Chemical Co.
Boake, A., Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
Dodge & Olcott Co.
Evans Sons Lescher & Webb, Ltd.
London Essence Co.
Poppelreuter, W.
Ransom, W., & Son
Schimmel & Co.
Spurway & Cie
Stevenson & Howell, Ltd.
Varaldi, F.
Wright, Layman & Umney, Ltd.
Zimmermann, Ohas., & Co.

OILS, MINERAL, FATTY

Allen, Stafford & Sons, Ltd.
Price's Patent Candle Co.
Schliemann's Oil & Ceresine Co
Stern Sonneborn Oil Co., Ltd.

OLIVE OIL

Goodall, Backhouse & Co.
Sparks, White & Co., Ltd.
Varaldi, F.

OPTICAL GOODS

Anglo-American Optical Co.
Botwright & Grey
Darton, F., & Co.
Maw, S., Son & Sons
Nitsche & Gunther Opt. Co., Ltd.
Raphael's, Ltd.

OPTICAL TUITION

British Optical Institute, Ltd.
Dioptric Association
Spectacle Makers' Company.

ORANGE QUININE WINE

Hobson, Joseph, & Son
Melrose-Drover Co., Ltd.
Millar, A., & Co., Ltd.
Robinson, B., & Co., Ltd.

ORGANOTHERAPY

Products
British Organotherapy Co., Ltd.

OTTO OF ROSE

Spurway & Cie

OTTO OF ROSE (SYNTH.)

Bush, W. J., & Co., Ltd.
Kerfoot, Thos., & Co.
Warwick Bros., Ltd.
Wright, Layman & Umney, Ltd.

PACKED GOODS

Allen & Hanbury's, Ltd.
Baiza Bros. & Stevenson, Ltd.
Blackie, Robert
Boulton Macro, Ltd.
Brook, Parker & Co., Ltd.
Cartwright, W. B., Ltd.
Cox, Arthur H., & Co., Ltd.
Christy, Thos., & Co.
Cupal, Ltd.
Davies, Sons & Co.
Evans Sons Lescher & Webb, Ltd.
Goodall, Backhouse & Co.
Harker, C. R., Stagg & Morgan
Lorimer Marshall, Ltd.
May, Roberts & Co., Ltd.
Newball & Mason
Oldfield, Pattinson & Co.
Potter & Clarke, Ltd.
Sangers
Standard Tablet & Pill Co., Ltd.

PALATINOLIDS

Oppenheimer, Son & Co., Ltd.

PAPER HANDKERCHIEFS

Powell, J. T., & Co.

PASTILLES

Allen & Hanbury's, Ltd.
Asche, O. F., & Co.
Burroughs Wellcome & Co.
Evans Sons Lescher & Webb, Ltd.
Taverner & Sons, Ltd.
Valda Pastilles
Warwick Bros.

PATENT AGENTS

Barker, R. W.
Newnham, Browne & Co.

PERFUME MATERIALS

Boehringer, C. F., & Soehnle
Bush, W. J., & Co., Ltd.
Kerfoot, T., & Co.
Naef, M., & Co., Suoors.
Schimmel & Co.
Schwarz, A. W.
Spurway & Cie.
Varaldi, F.
Wright, Layman & Umney, Ltd.
Zimmermann, O., & Co.

PEPPERMINT OIL

Bing, M. & A. C.
Bush, W. J., & Co, Ltd
Dodge & Oleott Co.

PERFUMES

Allen & Hanburys, Ltd.
Baisa Bros. & Stevenson, Ltd.
Barnetts Perfumery, Ltd.
Bronnley, H., & Co., Ltd.
Bnsh, W. J., & Co., Ltd.
Christy, T., & Co.
Erasmo Co., Ltd.
Evans Sons Lescher & Webb, Ltd
Gambles, J. C., & Co.
John Strange Winter
Kerfoot, T., & Co.
Lesool Perfumery Co.
McCracken, J. & R.
Priohard & Constance, Ltd.
Queloh, H. C., & Co.
Rivers, Hill & Co., Ltd.
Vinolia Co., Ltd.
Warriock Bros.
West, T., & Son
Wolf, F., & Sohn

PESSARIES (SOLUBLE)

Burge, Warren & Ridgley, Ltd.
Rendell, W. J.

PETROLEUM JELLY

Chesebrough Manfg. Co.
Gardner & Andrew
Schliemann's Oil & Ceresine Co.
Stern, Sonneborn Oil Co., Ltd.

PHOSPHORUS AND PREPS.

May & Baker, Ltd.

PHOTO. CHEMICALS

Boehringer, C. F., & Soehne
Johnson & Sons (Mfg. Chts.), Ltd

PHOTO. GOODS

Ayrton, Sandders & Co., Ltd.
Barclay & Sons, Ltd.
Burroughs Wellcome & Co.
Evans Sons Lescher & Webb, Ltd
Express Developing Co.
Ilford Ltd.
Kent, G. B., & Sons, Ltd.
Lennon, Ltd.
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Rajar, Ltd.

PHOTO. POSTCARDS, ETC.

Rajar, Ltd.

PILL MAKERS

Cox, A. H., & Co., Ltd.
Davies, Sons & Co.
Standard Tablet & Pill Co., Ltd.

PLASTERS

Allcock Manfg Co.
Berliner, Arthur
Dalmas, A. de St., & Co.
Galen Manfg. Co., Ltd.
Leslies, Ltd.

PLATE POWDER

Lees, A., & Co.

PLEATED PAPER

Darter, Wilkinson & Co.
Smith Bros. & Co.

POLISHES (VARIOUS)

Bradley & Bourdas
Oakley, J., & Sons, Ltd.

POSTAL BOXES

Eeles, Walker & Co.
Robinson & Sons, Ltd.

POWDER PAPER

Priohard & Constance, Ltd.

PRESS CUTTINGS

Central News

PRINTERS

Clyde Press
Ford, Shapland & Co.
Harrison & Waide
Suttley & Silverlock, Ltd.
Townsend, J., & Sons

PRINTING PRESS

Excelsior Printers' Supply Co.
Paragon Press Co.

PROPRIETARY ARTICLES

Anglo-American Pharm. Co.
Anglo Indian Drug & Chem. Co.
Arnfield, J. C., & Sons, Ltd.

PROPRIETARY ART.—cont.

Ashton & Parsons, Ltd.
Barclay & Sons, Ltd.
Beecham, T.
Bow's Liniment, Ltd.
British Drug Houses, Ltd., The
Burgess, E.
Carnick, G. W., Co.
Chameleon Oil Co., Ltd.
Christy, T., & Co.
Coleman & Co., Ltd.
Corbyn, Stacey & Co., Ltd.
Crimson Cross Dispensary,
Cnpal, Ltd.
Cyona Co., Ltd.
Daisy, Ltd.
Davenport, J. T., Ltd.
Demnith, R.
Dnnoan, Flockhart & Co.
Edwards, W., & Son
Evans Sons Lescher & Webb, Ltd
Faulding, F. H., & Co.
Fellows' Med. Manfg. Co.
Fennings, Alfred
Ferris & Co., Ltd.
Fox & Co. (Liverpool), Ltd.
Freeman's Chlorodyne, Ltd.
Fullford, C. E., Ltd.
Gambles, J. C., & Co.
Goodall, Backhouse & Co.
Harrison, Geo. W.
Henry, T. & W.
Hommel's (Dr.), Hæmatogea
Hughes, E. Griffiths
Iohthylol Gesellschaft
Kay Bros., Ltd.
Kntnow, S., & Co., Ltd.
"Lemoo and Oxo"
Lothhouse & Saltmer
Martindale, W.
May, Roberts & Co., Ltd.
Mergentheim Tablets
Mer-Syren (1911), Synd., Ltd.
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Oppenheimer, Son & Co., Ltd.
Owbridge, W. T., Ltd.
Phillips, Chas. H., Chem. Co.
Pinex Co., Ltd.
Poultogen Co.
Primer, J.
Resinol Chemical Co.
Richter, C., & Co.
Riedel, J. D., Co.
Rubenstein, Madame H.
Rubwel Co.
Sangers'
Sargol, Ltd.
Sohimmel & Co.
Scott & Bowne, Ltd.
Squire & Sons
Standard Tablet & Pill Co., Ltd.
Thermogene Co., Ltd.
Thompson & Capper
Tnnbridge & Wright
Valda Pastilles
Wait-and-See Proprietary
Warner Oliver, Ltd.
Warriock Brothers
White, A. J., Ltd.
Wilcox, Joseau, & Co.
Woodward, W., Ltd.
Wright, Layman & Umney, Ltd.
Zimmermann, C., & Co.

PUFFS

Solport Bros.

PUMPS

Berkefeld Filter Co., Ltd.

QUININE AND SALTS

Alliance Drug & Chem. Co.
Boehringer, C. F., & Soehne
Corbyn, Stacey & Co., Ltd.
Howards & Sons, Ltd.
Pointet & Girard

RADIO-ACTIVE MINERALS

Harrington Bros., Ltd.

RENNET

Fullwood & Bland
Oldfield, Pattinson & Co.

RESINS AND RESINOIDS

Allen, S., & Sons, Ltd.
Macfarlam, J. F., & Co.
Ransom, W., & Son
Smith, T. & H., Ltd.

RESPIRATORS

Zimmer & Co.

RUBBER GOODS

Berliner, Arthur
Burge, Warren & Ridgley, Ltd.
Haywood, J. H., Ltd.
Ingram, J. G., & Son
Maw, S., Son & Sons
Surgical Hosiery Co., Ltd.
Tompkins, James, Ltd.
Warne, W., & Co., Ltd.
X. L. Rubber Co.

RUBBER STAMPS

Richford, O. D.

SACCHARIN

Saccharin Corporation, Ltd.

SAMPLE CASES

Keane, Thomas

SANTONIN

Smith, B. A., & Co.

SAPONIN

Field, C. W.

SCIENTIFIC APPARATUS

Reynolds & Branson, Ltd.
Perken, Son & Co., Ltd.

SEA SALT

Tidman & Son, Ltd.

SEED-DRESSING

Hawker, Arthur E.
Tomlinson & Hayward, Ltd.

SERUMS AND ANTITOXINS

Allen & Hanburys, Ltd.
Burrongs Wellcome & Co.
Evans Sons Lescher & Webb, Ltd
Parke, Davis & Co.
Sohimmel & Co.
Wilcox, Joseau, & Co.

SHARES

McAdam & Tuckniss

SHEEP DIPS

Burt, Boulton & Haywood

SHEEP MEDICINES

Pettifer, Stephen, & Sons

SHELLAC

Kershaw, H. E., Ltd.

SHOP FITTING

Ayrton-Graham, Ltd.
Cook, George
Evans Sons Lescher & Webb, Ltd
Grant, D.
Josephs, Philip, & Sons, Ltd.
Maw, S., Son & Sons
Parnall & Sons, Ltd.
Rudduck & Co.
Sangers'

SHOW STANDS

London and Colonial Manfg. Co.

SOAPS, TOILET, &c.

Allen & Hanburys, Ltd.
Armour & Co., Ltd.
Bell, John Hills & Lucas, Ltd.
Bronnley, H., & Co., Ltd.
Calvert, F. C., & Co.
Chesebrough Manfg. Co.
Christy, Thos., & Co.
Cook, E., & Co., Ltd.
Erasmo Co., Ltd.
Eueryl, Ltd.
Evans Sons Lescher & Webb, Ltd
Fullford, C. E., Ltd.
Gibbs, D. & W., Ltd.
Harrison, G. W.
Hovenden, R., & Sons, Ltd.
John Strange Winter
Lesool Perfumery Co.
Olival Anglo-Spanish Soap Co.
Pears, A. & F., Ltd.
Peat Products (Sphagnol), Ltd.
Price's Patent Candle Co.
Resinol Chemical Co.
Wolf, F., & Sohn
Wright, Layman & Umney, Ltd.

SHOULDER STRAPS

Wood, Vincent

SODA FOUNTAINS

Flugel & Co.

SODIUM BICARBONATE

Brunner, Mond & Co., Ltd.
Electrolytic Alkali Co., Ltd.
Howards & Sons, Ltd.
Mumford, G. S., & Sons

SOOTHERS

Newbery, F., & Sons, Ltd.
Sohntze, F., & Co., Ltd.
Woolf, Lewis

SPECTACLES

Botwright & Grey
Darton, F., & Co.
Maw, S., Son & Sons
Nitsche & Gunther Opt. Co., Ltd
Raphael's, Ltd.

SPICES

Goodall, Backhouse & Co.

SPIRIT OF WINE

Burrough, J., Ltd.
Preston's Liverpool Distillery

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Internl. Sponge Importers, Ltd

SPRAYS

Burge, Warren & Ridgley, Ltd
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
Parke, Davis & Co.
Sangers
Toogood, Wm., Ltd.

SPRINKLER CORKS

Betts & Co., Ltd.

SPRUCE BEER

Hobson, Joseph, & Son

STARCH

Mumford, G. S., & Sons

STILLS

Bennett, Sons & Shears, Ltd.
Brown & Son (Automatic)
Stokes, F. J., Machine Co.

STOPPERS

Stipendium Stopper Co.

SUPPOSITORIES

Peat Products (Sphagnol), Ltd.

SURGICAL APPLIANCES AND DRESSINGS

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Bailey, W. H., & Son
Berliner, Arthur
Burroughs Wellcome & Co.
Bush, W. H., & Co., Ltd.
Dalmas, A. de St., & Co.
Davis, John Morgan, & Sons
Galen Manfg. Co., Ltd.
Gimber, W., & Son
Haynes, G., & Co.
Haywood, J. H., Ltd.
Liverpool Lint Co.
Macfarlam, J. F., & Co.
Martindale, W.
Mason Bros. & Chapman
Maw, S., Son & Sons
Queloh, H. C., & Co.
Reynolds & Branson, Ltd.
Robinson & Sons, Ltd.
Surgical Hosiery Co., Ltd.
Taylor, W. G.
Warne, W., & Co., Ltd.
Wood, Vincent
Woolley, J., Sons & Co., Ltd.

SWIMMING FLOATS

May, Roberts & Co., Ltd.
Schutze, F., & Co., Ltd.

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Camwal, Ltd.
Idris & Co., Ltd.
Sharman's Pat. Syphon Co., Ltd

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Bush, H. W., & Co., Ltd.

SYRUPS, MEDICINAL

Fellows' Med. Manfg. Co.

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Barrow, W. & J.

TABLET MACHINERY

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Bennett, Sons & Shears, Ltd.
Thompson & Capper
Wilkinson, S. W., & Co.

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British Drug Houses, Ltd., The
Cartwright, W. B., Ltd.
Cox, A. H., & Co., Ltd.
Davies, Sons & Co.
Dunnean Flockhart & Co.
Evans Sons Lescher & Webb, Ltd.
Johnson & Sons (Mfg. Chts.)
Martindale, W.
Parke, Davis & Co.
Standard Tablet & Pill Co., Ltd.
Thompson & Capper
Wand Manfg. Co.
Wigglesworth & Co.

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Burroughs Wellcome & Co.

TARTARIC ACID

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Boehringer, C. H. & Sohn

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Sumner's Typhoo Tea, Ltd.

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Huntley, Boorne & Stevens
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Armour & Co., Ltd.
Ayrton, Saunders & Co., Ltd.
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Blackie, Robert

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Quelch, H. C., & Co.
Rubinstein, Madame H.
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Saunders, J. Tozeau, Ltd.
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Haywood, J. H., Ltd.
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Wood, Vincent
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Kidston, W. M., & Co.
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Hubbuck, T., & Son, Ltd.
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(REGISTERED TRADE MARK)

PHILLIPS'

Is the ORIGINAL and ONLY GENUINE.

GUARANTEED

to contain AT LEAST 24 grains of Hydrate Magnesia in each fluid ounce.

IS ENTIRELY FREE

from OXIDE or CARBONATE of Magnesia and any suspensory matter whatever.

Special quotations for the 2/3 and 1/- sizes from:

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VALAZE

REMEMBER THE NAME.—Many ladies will ask you this summer for this beauty cream, made famous by London's fashionable West End Complexion Specialiste, Mme. Helena Rubinstein. It will not show flattering business acumen not to be able to supply it.

RETAIL PRICE: 4/6, 8/6, and 21/- A POT.

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The number of dentifrices is myriad, their names are legion,

But—

in principle and in efficiency there is but one,

CALOX

THE OXYGEN TOOTH POWDER.

Its principle is the evolution of oxygen.

Its efficiency as a cleanser of the teeth is due to the oxygen which it generates when used.

Not only antiseptic, but deodorant, two desirable properties of a tooth powder. Its oxidizing and deodorizing power was obvious in our experiments.—THE LANCET, London, Eng.

Possesses not only strong antiseptic, but deodorizing and oxidizing properties, as the result of which the teeth, after a few days' use of CALOX, acquire a pearly whiteness.—THE CHEMIST AND DRUGGIST, London.

CALOX is entirely different from other dentifrices. Its introduction marks a decided advance in the scientific development of a dentifrice, a fact which the dental profession the world over has been quick to recognise. Chemists should interest themselves in Calox because only a chemist can explain the peculiar virtues and value of an oxygen-producing dentifrice.

Price to the trade, 9/6 per dozen on the P.A.T.A. plan.

McKESSON & ROBBINS, New York, U.S.A., Manufacturers.

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Two Good Lines



POTTER & MOORE'S — Mitcham — Lavender Water

NEW STYLE POCKET FLASKS.

Retail 1/1. Wholesale 9/- doz.

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(True to
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Carnation Perfume ::

12/-, 18/-, 24/-, & 48/- doz.



SOLE PROPRIETORS:

W. J. BUSH & CO., LTD.

Ash Grove, HACKNEY, N.E.

And at NEW YORK, MOSCOW, MELBOURNE, SYDNEY & GRASSE.

Send to ELEY for these!

ELEY BROS. Ltd., possess facilities second to none for the manufacture of Silver- and Nickel-Plated Brass Boxes for Shaving Sticks and Aluminium Boxes for Denti-frice, Soaps, etc., also Tops, Caps, and Dredgers for Toilet and other Powders.

SOLID DRAWN TUBES, SMALL BRASS AND ALUMINIUM STAMPINGS.

ELEY BROS. Ltd., are large manufacturers of this class of goods to the wholesale trade. Prompt attention given to all inquiries, prices on application.

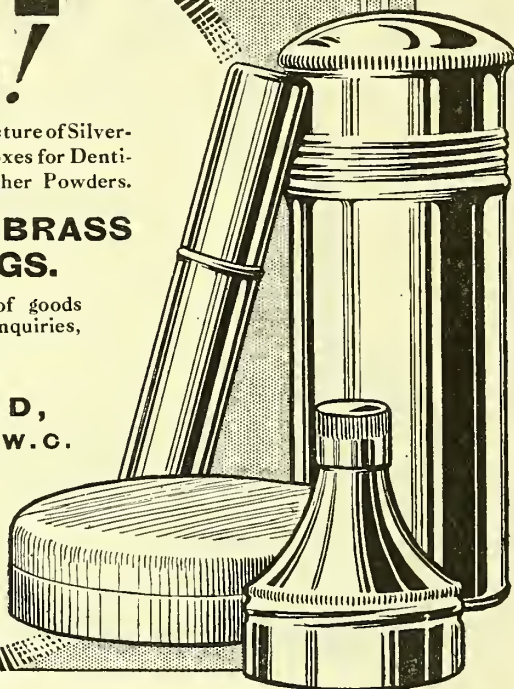
Address all enquiries for these goods to Dept. 21,

ELEY BROTHERS LIMITED,
254 GRAY'S INN ROAD, LONDON, W.C.

BIRMINGHAM: 29 and 30 Whittall Street.
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(EST. 1839.)

BIDWELLS, AXMINSTER, DEVON :: ENGLAND.



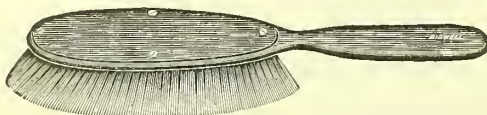
NO LOOSE HAIRS IN OUR
TOOTH BRUSHES.

Gold Medal Awarded



THE "GRIP" NAIL BRUSH.

IMITATIONS of our
Silver-drawn Tooth
Brushes are being sold.



FINE QUALITY HAIR BRUSHES.

BIDWELL, BIDWELL & CO., LTD.

SUPPORT HOME INDUSTRIES.

Estd. 1777.



Incd. 1900.

Diary, 1912, pp. 74, 75.

Winter Issue, 1912, pp. 48, 49.

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'SEMREH' SELF-FIXERS.

No. 6.—They are Neat.

Neatness is a desideratum in everything stocked by the Pharmacist. If efficiency be combined with neatness the value of the article is greatly appreciated. 'Semreh' Bottle Caps are the neatest finish to any cork, stopper or sprinkler; they are spirit-proof and air-proof and they are self-fixing. They are neater in appearance than any other capping in the world.

FULLY DESCRIPTIVE BOOKLET FREE
THE VISCOSÉ DEVELOPMENT CO., LTD.,
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EUCRYL TOOTH POWDER

YIELDS 100% PROFIT.

The Proprietors wish to call the attention of their numerous friends to the fact that the Cent. per Cent. Bonus Terms apply to the 1/- (Flat or Canister shape) as well as the 6d. tins.

3 doz. 1/- tins at 7/- per doz.	...	Cost	£1 1 0
3½ doz. (including free bonus)	...	Sell for	2 2 0
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PROPRIETORS:

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You can supply your Customers with high-class Toilet Preparations at extremely low prices, and get a good profit yourself.

LARGE BUYERS and SOLE AGENTS
for our Specialities wanted everywhere.

Face Powder, best quality and special appearance; Tooth Paste in GLASS, ALUMINIUM-COVERED JARS; SHAVING STICKS IN FANCY DECORATED TINS; Tooth Powder, superior and cheaper to any other POMADE HONGROISE, five sorts and in all prices; COSMETIQUES for fixing the Hair, six qualities and sizes; "ELSO" FACE MASSAGE CREAM, extra fine quality; BRILLIANTINE IN DIFFERENT SIZES, qualities, and prices, ALSO WITH BUYERS' NAMES. Toilet Paraffin, Bay Rum, Lanoline, Lime Cream, "Flowerine" Hair Cream, Violet Powder, in highly decorated tins, Sachets, RAZOR PASTE, Scurf Pomade, "BRYSTA" CLOTH CLEANER, at lowest prices.

IT WILL PAY YOU to write for Samples and Quotations to:—

The
WHOLESALE CHEMICAL WORKS,
114 Copenhagen Street, King's Cross, LONDON (Eng.)

Stock the articles which your customers require—and will ask for again. Among these

CALVERT'S

Carbolic Tooth Powder

occupies, of course, a prominent position all over the world. And there is a good demand too for the other specialities, Carbolic Soaps, Ointment, Disinfectants, &c., made by F. C. Calvert & Co., Manchester, England. Illustrated Price List post free on request.

EVERY GENUINE PACKAGE



BEARS THIS LABEL

EWEN'S LARD

is the
ONLY LARD
that
is made exclusively
for pharmaceutical
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preparations
and is the
**BEST AND
MOST RELIABLE**
Guaranteed B.P.
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"ELSA PLATZ" BRAND

Unrivalled for Delicacy and Strength.

Eminently suitable for a Speciality.

Sells readily at very handsome profits.

Sample and Prices on application.

SPURWAY & CIE., Ltd.

MANUFACTURING PERFUMERS,

14 BARTHOLOMEW CLOSE, LONDON,
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WE SHALL ESTEEM THE FAVOUR
OF YOUR INQUIRIES FOR:—

NATURAL
FLOWER OILS,
ABSOLUTE, LIQUID,
CONCRETE, (SOLID.)

Rose.
Orange flowers.
Jasmin.
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Cassie.
Reseda.
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Violet.

ARTIFICIAL
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SYNTHETIC
PERFUMES.

Benzyl Acetate.
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Geranium Artificial.
Musk Artificial (all qualities).
Phenylethyl Alcohol.
Artificial Violet 100%
(all qualities).

ESSENTIAL
OILS.

Almond. Peppermint
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Clove. Petit Grain.
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(all qualities). Thyme.
Lavender Wintergreen.
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SPECIALITIES.

Oil Oak Moss colourless. Neroli, H.A.
Oil Violet leaves colourless. Orris Root concrete.

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BARNETTS PERFUMES & COLD CREAM

STAND UNRIVALLED.

Samples and Prices (in bulk) on Application.

BARNETTS PERFUMERY LTD.,

126/128 Bristol Street, BIRMINGHAM.

USE BEST BOTTLES ONLY.

WILL YOU PLEASE TRY OURS.

PLEASE NOTICE. All orders given this month will be
executed at following low prices—

Clear Blue Tinted, plain or graduated. Round Edges.

3 & 4	6 & 8	12	16 ounce.
7/-	8/-	12/-	14/- per gross.

PANEL BOTTLES 1/- per gross extra.

FIRST QUALITY. Quinine Tinted. Round Edges.

3 & 4	6 & 8	12	16 ounce.
10/-	11/-	18/-	20/- per gross.

WHITE PHIALS—GOOD QUALITY.

$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{4}$	2 ounce.	} Plain or Teaspoons
3/6	4/-	4/6	5/6 per gross	

The New Shape OVAL FRONTED BOTTLES.

6 oz. size 8/6 per gross.

I. ISAACS & CO., 106 MIDLAND ROAD,
ST. PANCRAS, LONDON, N.W.

Carriage paid to certain stations. Particulars on application.
Established 100 years. Bankers:—London, County & Westminster Bank.

*"An armed right hand
our sole reply to our foes"*
Euripides 450 B.C.

In 1912 the best weapons against competition are Facts — Certified Facts — regarding quality, and square-dealing with liberal, protected profits.

It is something new to be able to tell a customer just what a dentifrice can do in addition to polishing the exposed surfaces of the teeth — to say that well-known bacteriologists have tested EUTHYMOL TOOTH PASTE and found that, in the strength usually applied to the teeth, it is able to kill the germs that cause Dental Decay within thirty seconds.

And there is satisfaction (1) in telling the customer,

because the facts appeal to his intelligence and increase his knowledge, and (2) to you because of the opportunity to impart definite, truthful and useful information, thus securing the confidence and good-will of the customer.

*Recommend the things that will enhance
your reputation for quality.*

PARKE DAVIS & Co.
LONDON



EMETINE HYDROCHLORID. (Whiffen's).**EMETINE HYDROBROMID.** (Whiffen's).*For Hypodermic Injection.**The New Remedy in Amœbic disease.—Vide British Medical Journal, Aug. 24, 1912, pp. 405-408.**We have manufactured these preparations during the past fifteen years, and they may be obtained by ordering Whiffen's Brand, from all Chemists and Wholesale Drug Houses in the United Kingdom and Abroad.*

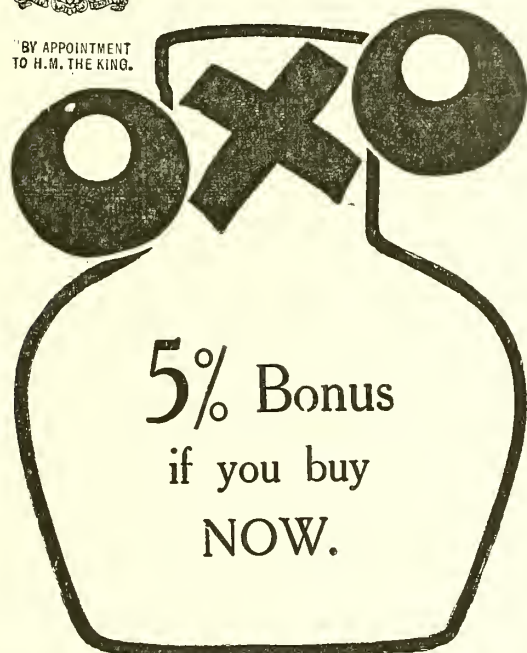
WHIFFEN & SONS, LIMITED, BATTERSEA, LONDON, S.W.

Telephone—254 and 255 BATTERSEA.

ELASTIC GUM SURGICAL INSTRUMENTS.Catheters and Bougies, in Black or Brown Gum, and Finest Silk Web. Specula, Rectal and Esophageal Instruments.
Horse Catheters and Cattle Probangs. Wholesale and Export only. *Price List from the Manufacturers.***MASON BROS. & CHAPMAN, 107 Whitecross St., LONDON, E.C****C. MELIN & CO.**ESTABLISHED
1865.*7 George Street, Crutched Friars, London, E.C.*supply **GLASS BOTTLES, JARS, and TUBES***of every description; plain, cut, and stoppered**Direct from the Works.***FOR CHEMISTS & PERFUMERS :: WHOLESALE & EXPORT.****Salrado
Compound.****BISURATED
MAGNESIA.**Retail, 1/9.
Trade, 17/- per doz.**HARRIETT META'S
GOLD MEDAL HAIR TONIC.**Retail, 2/11.
Trade, 26/- per doz.**Sulthine
Concentrate.****Lavona
de Composee****← ALL SELLERS →****Flowers
of Oxzoin.***TO-KALON Guarantee.
Extensively Advertised.
No Risk. Good Profits.***SALE GUARANTEED***by the***TO-KALON Manufacturing Co., Ltd.***To-Kalon House, Great Portland St., London, W.*



BY APPOINTMENT
TO H.M. THE KING.



A Special 5% Advertising Bonus

is allowed on all sizes of Oxo in bottles purchased between 11th September and 31st October, 1912.

The only condition is that you display Oxo Window bills for four consecutive weeks beginning any time between 11th September and 30th November, 1912.

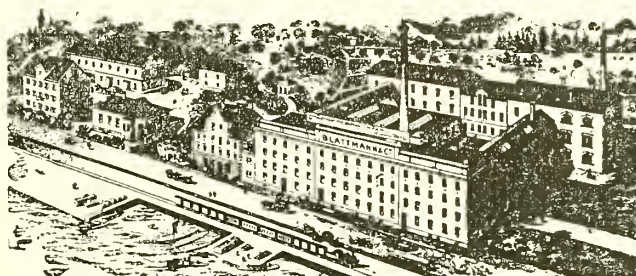
This 5% Bonus, together with trade discount and Annual Rebate, lifts Oxo right above all other fluid beefs as a profit-maker.

For full particulars of Advertising Bonus, etc., apply by postcard to

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Sole Agents for Liebig's Extract of Meat Co., Ltd., Manufacturers of Oxo.

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BLATTMANN'S CHEMICAL WORKS, WAEDENSWIL, SWITZERLAND.

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BLATTMANN'S PURE EGG

LECITHIN,

LECITHIN ALBUMEN, & LECITHIN MILK In powder form for the manufacture of Tablets, Pastilles, Foods, etc.

EGG PHOSPHATIDS a preparation containing 10% P₂O₅, soluble in Meat Juice, Liquid Foods, and particularly in Tonic Wines.

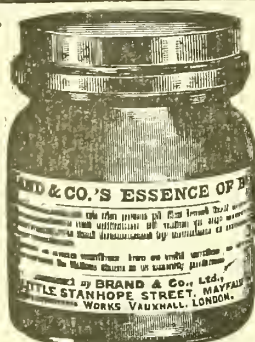
BROM-PHOSPHATID
8% P₂O₅, 20% Bromine.

PHOSPHATID TONIC SYRUP

IOD-PHOSPHATID
8% P₂O₅, 20% Iodine.

PLEASE SEND FOR OUR LATEST PRICES.

G. M. WILLIAMS & Co., Ltd., 47 Lamb's Conduit St., LONDON, W.C.



IN GLASS

BRAND'S ESSENCE OF BEEF AND OF CHICKEN FOR INVALIDS.

Invaluable in all Cases of Exhaustion and Weak Digestion.

BRAND & CO., LTD., "Mayfair Works," 78 South Lambeth Road, Vauxhall, LONDON, S.W.

CEREGEN

THE PROTEID-PHOSPHATE NERVE ^(Regd.) FOOD.
OVER 50% PROFIT ON RETURN.

Ceregen once introduced secures you regular and very profitable customers.

JOHN BELL, HILLS & LUCAS Ltd., OXFORD WORKS, Tower Bridge Rd., S.E.

VEROX FLUID BEEF.
ALL BEEF & ALL BRITISH.

HIGHEST AWARDS FOR
PURITY AND STRENGTH.

TOOTH'S EXTRACT OF MEAT CO.
12 DUKE STREET, S.E.

ESTABLISHED 1865.

TELEPHONE, 7368 CENTRAL.

TIDMAN'S SEA SALT.

ON P.A.T.A. LIST.
INCREASED PROFITS TO ALL WHO KEEP IT IN STOCK.
Orders of Twenty Shillings in value and upwards Carriage Paid. Cases Free.

	Advertised Price.	Minimum Retail Price.	Minimum Wholesale Price.
1d. Packets.	1/- per box 12in	11d. per box	8/6 pr. grs.
2d. "	2/- " "	1/10 " "	16/9 " "
1d. linen Bags.	1/- " "	11d. " "	8/6 " "
2d. " "	1/- " "	6 in box 11d. " "	16/9 " "
Boxes, about 1 1/2 lbs	4d.	3 1/2d. " "	2/10 pr. doz.
" " 3 "	8d.	7d. " "	5/8 " "
" " 7 "	1/2	1/- " "	10/- " "
" " 14 "	2/-	1/10 " "	18/3 " "

SINGLE BAGS of following 3 sizes sent CARRIAGE PAID to any place in the United Kingdom, so that there is no Stock to hold.

	Advertised Price.	Minimum Retail Price.	Minimum Wholesale Price.
28-lb. Bags (or Boxes)	3/- each	3/-	2/6 each
3-cwt. Bags	5/6 "	5/6 "	4/7 "
1-cwt. Bags	10/- "	10/- "	8/4 "

Cash Discount, 2 1/2% on orders of £1 and upwards.

TIDMAN & SON, LTD., WAPPING, LONDON, E.



INDIA RUBBER

(Red Mineralized and Arabesque).

SURGICAL, CHEMICAL, DOMESTIC ARTICLES, SYRINGES, ENEMAS, WATER BEDS.

Manufacturers of every description of INDIA RUBBER, Wholesale & Export only.

WM. WARNE & CO., Ltd., 29 Gresham Street, LONDON, E.C.



[See p. 175, Jan. 27, 1912.]

DENTAL TOOLS & MATERIALS.

Teeth, Rubbers, Anæsthetics, Chairs, Engines, etc.

Low Prices. First Quality. NEW CATALOGUE POST FREE. Write for Quarterly Journal.

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7 TO 12, ALDERSGATE ST.
LONDON, E.C.

Maw's

Page.

Telegraphic Address: "ELEVEN LONDON."

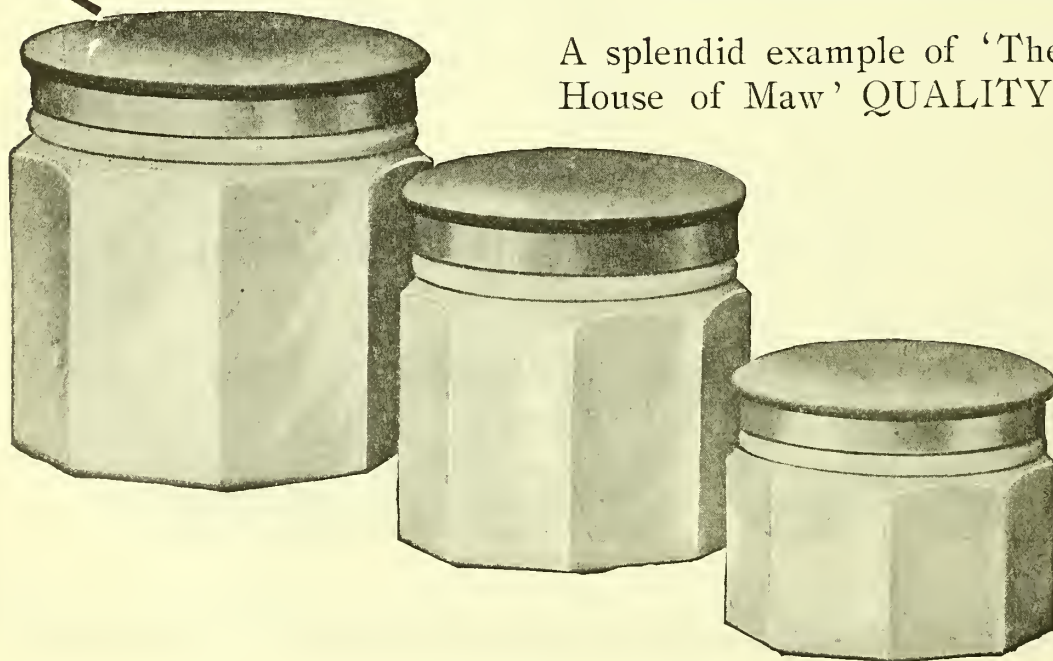
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Usual Discount.

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A Safe, Speedy, Effective and Profit-earning Sub- stitute for the Mustard Plaster

CAPSICUM "VASELINE" acts with direct and soothing effect in all cases where the old mustard plaster was used. It is much more pleasant in use, and does not blister even the tenderest skins—a great objection to the use of mustard plasters.

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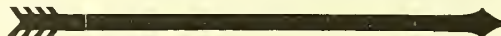
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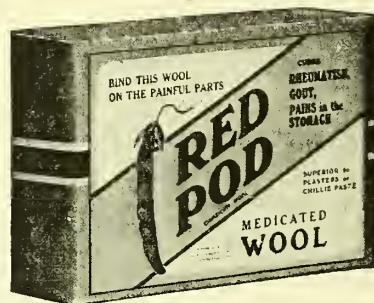
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GAUZE COVERED WOOL, IMPREG-
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SALICYLATE. IN NEAT CARTONS
4 IN. BY 6 IN.

SERVES A SUPERIOR PURPOSE TO
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BUT METHYL-SALICYLATE — THAT
IS WHY.



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THESE ARE JUST THE SORT TO SELL—NOT THE CRUMBLY SORT OF TABLETS—
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VICHY-ETAT PASTILLES

Two or three Pastilles after each meal facilitate digestion.

CAUTION.—Each bottle from the STATE SPRINGS bears a neck label with the word "VICHY-ETAT" and the name of the SOLE AGENTS:—

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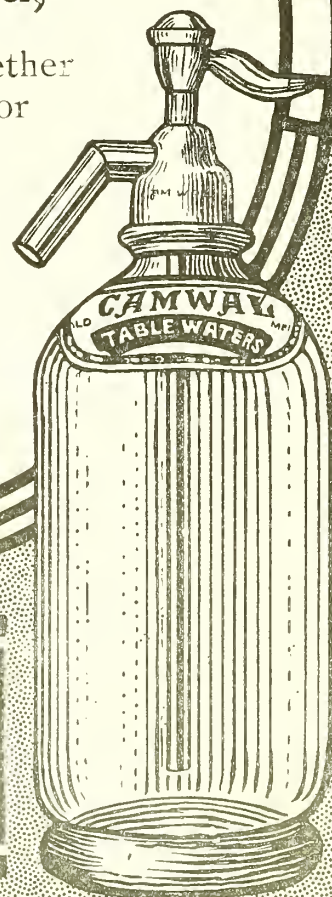
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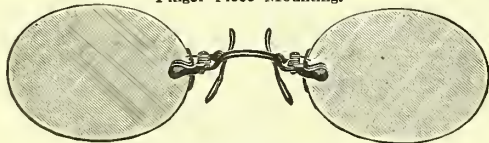
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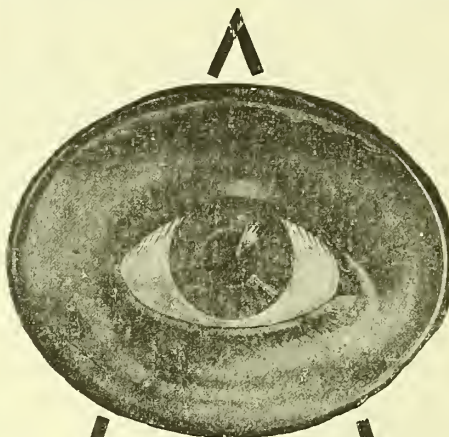
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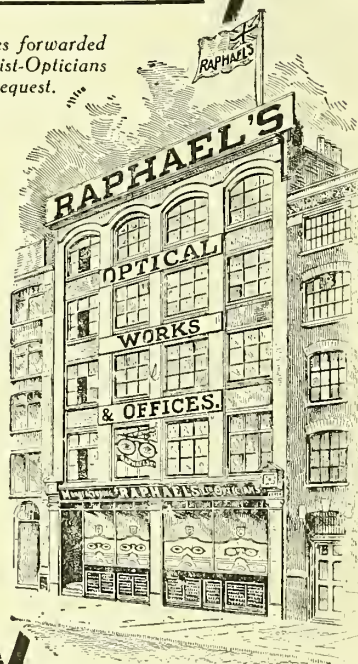
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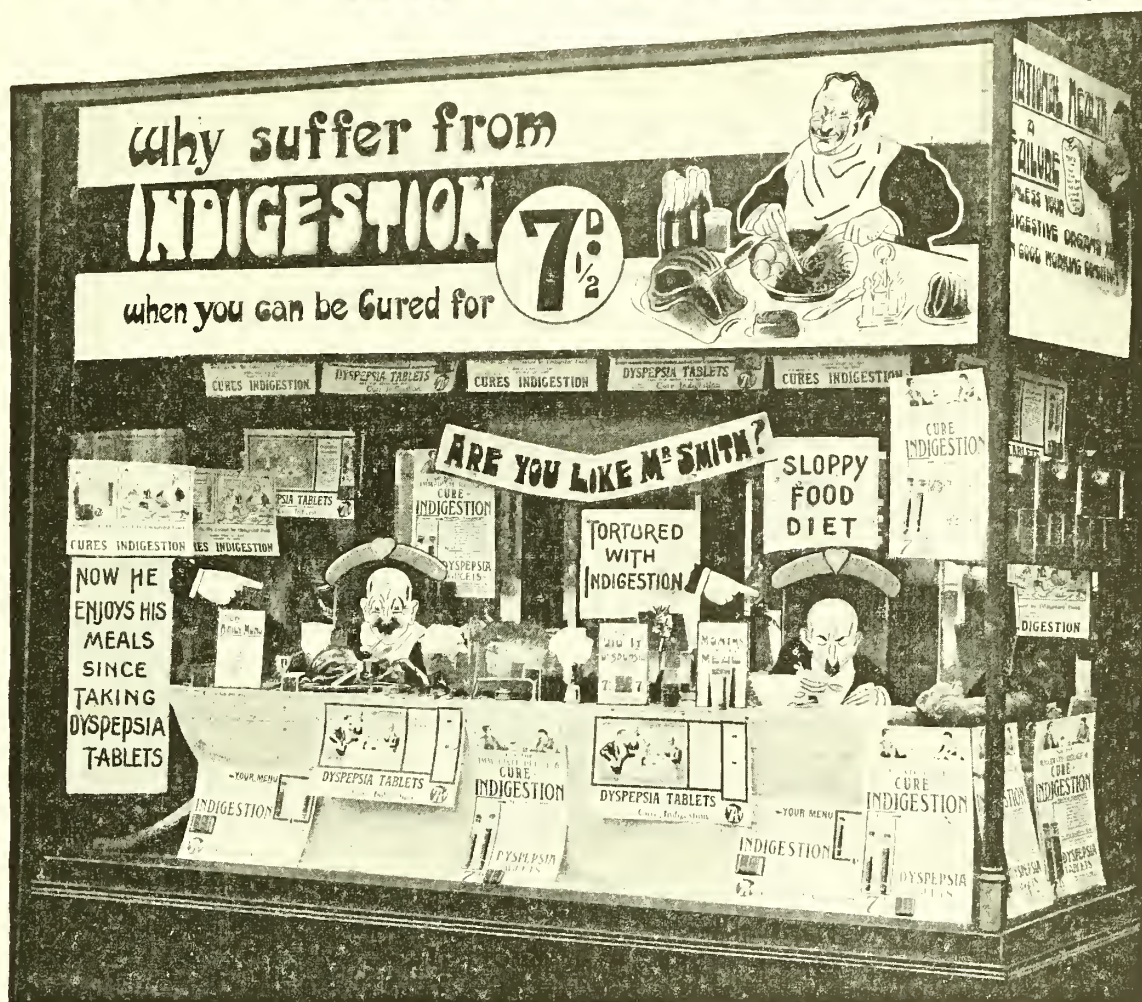
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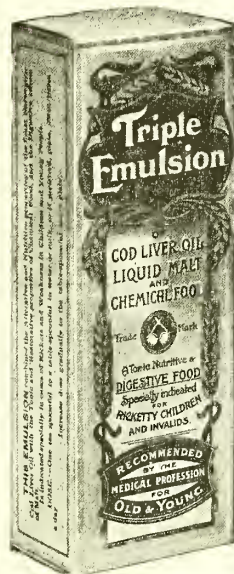
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These products realise the ideal. Exceptional purity and uniformity of composition are secured by employing only the finest materials, the most approved methods of production, and scientific standardisation.

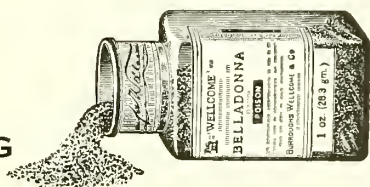
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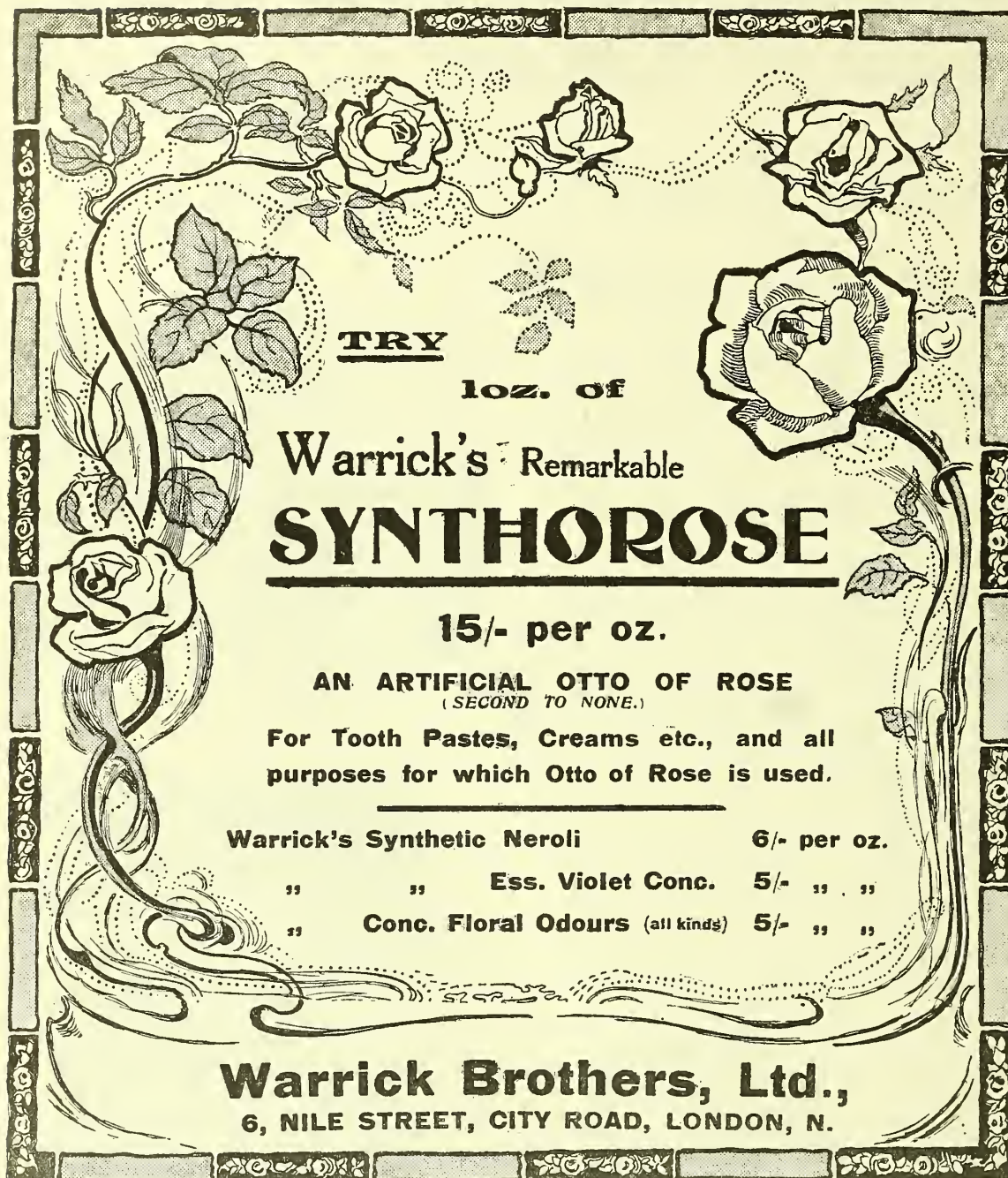
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For Tooth Pastes, Creams etc., and all
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DIARY PREPARATION.

Subscribers to THE CHEMIST AND DRUGGIST in business in far-off parts of the world like to have their annual *Chemists' and Druggists' Diary* to begin the New Year with. In order to ensure this the *Diary* must be put to press at the end of October and despatched by the mails leaving London early in November. The Publisher desires to remind advertisers, therefore, that the preparation for

The Chemists' and Druggists' Diary, 1913,

has already begun, and he would appreciate their co-operation and assistance in sending in copy and instructions for their announcements now.

SUMMARY OF THIS ISSUE.

The more notable items only are dealt with.

C. & D. Diary, 1913.

Subscribers who desire to secure exemption from stamp-duty for any medicinal preparations on the ground that they are known, admitted, and approved remedies should send us the formulas for publication in the *C. & D. Diary*, 1913, now in preparation.

Congress of Applied Chemistry.

Our special representative at the International Congress in America sends a graphic account of the reception at the White House by President Taft (p. 54).

The inauguration of the Congress at Washington under the presidency of Dr. W. H. Nichols is also described (p. 53).

More of the papers communicated to the Pharmaceutical Chemistry Section are given, with the discussions on them, including illustrations of fields of digitalis and stramonium, and interesting observations on quinine alkaloid (pp. 57-58).

A cabled message regarding the final general meeting is on p. 58.

Articles and Communications.

Chavosote, elbone, mucusane, and systogene are the latest new remedies (p. 45).

Some new facts in the chemistry of alkaloids worth the notice of dispensers are given on p. 49 and p. 65.

Mr. Bagley, Dunedin, has tested Mr. E. W. Lucas's ointment formulas for the B.P., and finds them satisfactory (p. 66).

The extent to which the British Dental Association want the Dentists Act amended is now stated in black and white (p. 51).

The Government Chemist's Annual Report is epitomised in an article beginning on p. 50. Dr. Dobbie says more than usual about medicines.

The British Medical Association's Medical Service Scheme is explained in the first Editorial article. This scheme dovetails with National Insurance medical benefit. We refer to the present condition of the dispensing arrangements (p. 48).

Mr. C. C. Bell communicates some observations on the history of camphor, in which the confusion respecting different kinds is referred to (p. 52). We also note that the Japanese are now using synthetic borneol in place of Barus camphor (p. 51).

News of the Week.

Our qualitative analyses for students are resumed (p. 34).

Numerous new contracts for drugs are reported on p. 35.

Mr. J. F. Tocher has sold his pharmacy in Peterhead (p. 37).

The Army Manœuvres in East Anglia brought business to chemists (p. 34).

"Nyal" has come across the Atlantic as a rival to "Rexall" (p. 51).

Mr. Stringer, treasurer of the Chemists' Dental Society, died on Sunday (p. 42).

Excise officers are still busy on unstamped medicine cases. Two are reported on p. 40.

A question of copyright in regard to fat-reducing advertisements is before the Law Courts (p. 40).

Our Paris correspondent contributes a digest of the proposed codification of French pharmacy laws (pp. 37-38).

The public examination in bankruptcy of T. Howard Lloyd & Co. has taken place, with more financial relations (p. 41).

Trade and Market Matters.

The present price of turpentine is very low, for reasons given on page 61.

Market changes include a further advance in arsenic. Hydrochloric acid, geranium oil, American peppermint oil, balsam Canada, and pepper are more or less dearer. French lavender oil, orange oil, damiana, ammonia sulphate, and oxalic acid are among the cheaper articles. A moderate quantity of first-hand drugs was offered at auction to-day (p. 60).

CORNER FOR STUDENTS.

Conducted by Leonard Dobbin, Ph.D.

All communications for this section should be addressed thus: "Corner for Students, 'The Chemist and Druggist,' 42 Cannon Street, London, E.C."

QUALITATIVE ANALYSIS FOR JUNIOR STUDENTS.

A MIXTURE of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture will comprise acids and inorganic bases occurring in the British Pharmacopœia, and is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, marked "Corner for Students" on the top left-hand corner) will be received up to Tuesday, September 24, and the samples will be posted on the following day.

Students' reports will be received up to Saturday, October 5. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

The prizes for this analysis will be awarded only to apprentices or assistants who are preparing for the Qualifying examination of the Pharmaceutical Society of Great Britain or of Ireland, *which fact must be attested on their reports*. Others may obtain specimens of the mixture of salts, and their reports will be separately adjudicated, but they will be regarded as *hors concours*. Correspondents who do not state that they are preparing for a qualifying examination will be included in the latter list.

The Shops Act, 1912.

The following are brief particulars of recent local arrangements:

Bath.—The Town Council on September 16 decided to seal an order for chemists, etc., to close on Wednesdays at 1 P.M.

Bermondsey.—The Borough Council on September 17 reiterated its determination not to act as agent of the London County Council in the local administration of the Shops Act.

Birkenhead.—The Town Council proposes to make an order for the closing of pharmacies on Thursdays at 1 P.M.

Camberwell.—The Borough Council is still of opinion that local administration is the best and most economical, and has agreed to accept 75 per cent. of the cost of such administration from the London County Council, subject to a satisfactory proportion of the London boroughs agreeing to administer the Act locally.

Enfield.—The Urban Council on September 11 reported that a *prima facie* case had been made out for an order for closing by chemists in the district west of the Cheshunt branch of the Great Eastern Railway on Wednesdays at 1 P.M. It was decided to take steps to make the order. In the Ordnance Ward Wednesday had been selected for half-day closing, and two chemists had signed the petition for an order, one had refused, and the other remaining chemist would not sign until he was assured of unanimity. In the Ponders End Ward two chemists had signed in favour of an order for Thursday, but the third had declined, as he desired Wednesday to be the early closing day as observed by the various tradesmen in his district. The matter was referred back for further inquiry.

Kirkcaldy.—The Town Council announces that it proposes to make a closing order for shops where medicines and medical and surgical appliances are sold.

Plymouth.—The Town Council on September 13 issued an order for half-day closing for chemists on Wednesdays at 1 P.M.

Southend-on-Sea.—An order fixing Wednesday at 1 P.M. as the early-closing day for chemists and other vendors of medicines, etc., was issued by the Town Council on September 6.

ENGLISH AND WELSH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

The premises of the late Mr. Williams, chemist, at Llandilo, are to be converted into a bank.

The question of dispensing at the Merthyr Workhouse (*C. & D.*, September 14, index folio 424) has caused considerable discussion in the local Press.

Mr. J. J. Shawyer, chemist and druggist, 12 Wood Street, Swindon, who had declined to pay the educational portion of the poor-rate on conscientious grounds, was summoned before the local Bench last week. He paid the sum (1s.) under protest.

The fifth annual show in connection with the Horticultural Society of the employés of Messrs. Ferris & Co., Bristol, attracted a record entry. The awards made by the judge, Mr. A. H. Sage, were as follows: Collection of Vegetables: 1, G. Baker; 2, F. Bennett. Plate of Potatoes: 1, S. Burns; 2, W. Still. Dahlias: 1, G. Baker; 2, F. Bennett. Bouquet of Flowers: 1, T. Watson; 2, F. Bennett; 3, G. Baker. Lady's Spray: 1, F. Bennett; 2, A. Bennett.

Satisfaction was expressed at a Corporation luncheon at Coventry last week at the prospect of Colonel Wyley (Messrs. Wyleys, Ltd.) becoming Mayor of his native city for a second year. Councillor Bettmann, in referring to his misgivings when the Council decided last year to choose a Mayor outside its ranks, said that Colonel Wyley, had dispelled every kind of criticism by the display of his civic virtues, amiability, judiciousness, and tact.

The induction of the new rector of St. Mary-le-Bow, Cheapside, in the City of London, took place at midday on Wednesday, September 18, the ceremony being very impressively carried through by Dr. Holmes, the Venerable Archdeacon of London, who read the mandate of the Bishop of the Diocese completing the rector's initiation. There was a State attendance of the Lord Mayor and Sheriffs, and Aldermen Colonel Dunn, Sir Walter Vaughan Morgan, Bart., and Sir Charles Wakefield, for the three Wards of Cheap, Cordwainer, and Bread Street. An interesting feature of the occasion was the presence of Colonel W. F. Wyley, the Mayor of Coventry, who acted as Churchwarden to Canon Masterman at St. Michael's Church. He is chairman and managing director of Wyleys, Ltd., wholesale chemists, of Coventry, and was thus associated as a representative of pharmacy with the present Lord Mayor of London, the first doctor to occupy the Mayoral chair.

The Army Manœuvres.

The world's centre of military interest this week has been East Anglia, where an invading army has been pushing its way towards Cambridge with the object of attacking London. The King came from Balmoral on Monday to watch the Manœuvres, and put up at Trinity Lodge, Cambridge. On Wednesday afternoon the mimic war came to a sudden stop some miles north of Cambridge, the two forces having come into such conflict that only the bayonet could decide the matter. In the meantime a special correspondent of the *C. & D.* had cycled from London for the purpose of gathering what effect the 50,000 men had had on the drug business. He got as far as Royston before he found the slightest indication of military occupation, and there he learnt from a local chemist that there had been a fair amount of custom from the military men in the neighbourhood, especially in toilet articles, dentifrices, and the like. All classes of military men had come into his shop, from orderlies to Generals. One "Tommy" came in to get a tooth drawn, and the chemist did it expertly. He found in the course of conversation that in the camp to which the patient was attached there was a good outfit of surgical appliances but no dental forceps. This chemist had experienced an exceptional demand for toilet-paper, an article not commonly wanted in the district, and he suggested to one of the first customers for this article that he would get it at a grocer's, but it was "chemist's toilet-paper" that was wanted, so a stock was got in to meet the demand. The

same story was repeated elsewhere, especially in Cambridge, and we note the fact because the line is a profitable one, and the majority of people prefer to get it at a chemist's. A battle in the neighbourhood of Baldock was expected on Wednesday morning, but it appears not to have come off, and the only sign of military occupation was supplied by numerous motor-cycles ridden by scouts and messengers. In Cambridge a good many officers were about, especially on King's Parade, and from our correspondent's inquiries it appeared that the chemists had been quite alive to the possibilities of business, and the past week has been a good deal better than the corresponding week of last year, but not altogether up to expectations. Toilet articles were in good demand, and fair business was done in toilet soaps. Mr. Arthur A. Deck, whose pharmacy on King's Parade is just opposite Trinity, in a pleasant chat with our correspondent, expressed himself as pleased with the novel incursion into the quiet of the vacation. He has had a busy time in the dispensing department as well as in the retail, many officers having their prescriptions dispensed, and he also supplied goods to the Royal party. Mr. Deck had been struck by the courtesy of the military men, and the conclusion is that it was altogether a pleasant invasion, from which pharmacy has benefited perhaps more than dealers in comestibles, as the commissariat department was done under contract.

Analysts' Affairs.

The Portsmouth analyst (Mr. F. W. Arnaud), in his report for 1911-12, says that of over one hundred drug-samples submitted for analysis, only six were adulterated. Considering the number and variety of the drugs examined, the percentage failing to comply with the strength and purity demanded by the British Pharmacopœia is very small. The defective samples were liquid extract of cinchona (3), liquid ammonia (1), and white-precipitate ointment (1).

The Finance Committee of the Bermondsey Borough Council have drawn the attention of the Public Health Committee to what they describe as "the heavy cost of analyses," and asked if the sum could not be reduced. Last quarter 307 samples were analysed, at a cost of 105*l.* 12*s.* The Public Health Committee, in reply, state that the estimate for analyses for the current year is 620*l.*, and consequently the expenditure is within the allotted sum. They also informed the Finance Committee that the expenditure is a very necessary one.

International Association of Leather Trades Chemists.

A conference of this Association has been held in London this week, under the presidency of Dr. J. Gordon Parker, F.I.C. The proceedings commenced with a reception at the Leathersellers' Hall, St. Helen's Place, on Monday morning, when a welcome was extended by Mr. W. F. Reid on behalf of the Society of Chemical Industry; Mr. W. P. Dreaper, for the Institute of Chemistry and Society of Dyers and Colorists; Mr. A. C. Chapman, for the Society of Brewers; Mr. James Swinburne, for the Faraday Society; and Mr. Frederick J. Lloyd, for the Agricultural Analysts' Association. Subsequently the Leathersellers' Company entertained a party of 120 at luncheon in the Trocadero Restaurant, and in reply to the toast of "The British Chemical Societies," proposed by Professor H. R. Procter, of Leeds, Mr. Thomas Tyrer, Treasurer of the Society of Chemical Industry, made an extremely interesting speech on chemical societies, in the course of which he traced the origins of numerous societies of chemists in this country since the Chemical Society was founded in 1841. Referring to pharmacy he said:

"We have the Pharmaceutical Society of Great Britain, with its Northern Branch in Scotland, its neighbour in Ireland, and its offspring the British Pharmaceutical Conference. A peculiarity of the British Pharmaceutical Society is its practical legal monopoly of the right of its members to use the designation 'Chemist,' a right recognised in the Charter of the Institute of Chemistry."

The toast of "The Hosts" was given by Professor Dr. Becker, of Frankfurt, in an excellent English speech.

Manchester Notes.

The Entertainment Committee of the local Pharmaceutical Association is busy making arrangements for the dinner and concert at the Grand Hotel on October 9. Ladies are to be invited this year.

A useful syllabus of classes has been issued this week by the Manchester School of Technology. Students and apprentices will find it of great service in helping them to map out their classes so as to get the most out of their spare time.

Mr. W. Griffiths Hughes, the Hon. Secretary of the Manchester Pharmaceutical Association, is to be married on September 27. This recalls the fact that the last Hon. Secretary, Mr. James Grier, M.Sc., was also married while holding office.

Contracts.

Nottingham Guardians.—Boot's Pure Drug Co., Ltd., for soda-water.

Cambridge Guardians.—Mr. J. Evans appointed druggist for six months.

Newport (Salop) Guardians.—Mr. F. H. Slinn, chemist, Newport, for the supply of drugs.

Chelmsford Joint Hospital Board.—Corbyn, Stacey & Co., Ltd., for drugs, dressings, etc.

Prescot Guardians.—Evans Sons Lescher & Webb, Ltd., Liverpool, for drugs, druggists' sundries, and proprietary articles.

Hemel Hempstead Guardians.—Mr. F. Chapman, chemist, Hemel Hempstead, for a six months' supply of surgical dressings, etc.

Sheffield Guardians.—Evans Sons Lescher & Webb, Ltd., for the supply of drugs and sundries during the ensuing half-year for 159*l.* 6*s.* 2*d.*

Wakefield Guardians.—Mr. W. Pollard, chemist, Wakefield, for the supply of drugs, oils, colours, and surgical appliances to the workhouse.

Chichester Guardians.—The Timothy White Co., Ltd., for Jeyes' fluid at 3*s.* 6*d.* per gal., carbolic acid at 2*s.* per gal., and cod-liver oil at 8*d.* per pint.

Warrington Guardians.—For supplies during the half-year ending March 31, 1913: Corbyn, Stacey & Co., Ltd., for drugs; Albert Browne, Ltd., Leicester, for dressings.

Mile End Guardians.—Hodgkinson, Prestons & King, for drugs at 590*l.* 2*s.* 8½*d.*, with 1¼ per cent. discount; Galen Manufacturing Co., Ltd., for druggists' sundries at 453*l.* 6*s.* 3*d.*

Twickenham Urban District Council.—Mr. A. Feather, chemist, Twickenham, for 240 gals. carbolic soluble fluid at 1*s.* 2*d.* per gal., and one ton of Corporation powder at 5*l.* per ton; Mr. C. J. Palmer, chemist, Twickenham, for 240 gals. carbolic soluble fluid at 1*s.* 2*d.* per gal., and one ton of carbolic powder at 4*l.* 10*s.* per ton.

During the consideration by the Newport (Mon.) Guardians of bovril supplies it was stated that the Board would save 2*d.* per lb. by buying direct. A Guardian also advocated this course, as they could depend upon the bovril being fresh. The tender was then awarded Bovril, Ltd., Bristol, for bovril at 3*s.* 9*d.* per lb., and invalid bovril at 4*s.* 9*d.* per lb.

West Ham Town Council.—The existing contracts of the Education Committee with Jeyes' Sanitary Compounds Co., Ltd., to supply cyllin at 3*s.* 6*d.* per gal., and with Burt, Boulton & Haywood, Ltd., to supply ialine at 3*s.* per gal., have been extended until April 30, 1914. The tender of Messrs. Edward Cook & Co., Ltd., for cofectant at 2*s.* 10*d.* per gal. has also been accepted.

Government Contracts.—*Admiralty*.—Livett, Frank & Son, Ltd., for shellac; J. Calder & Co., Ltd., Bo'ness, for methylated spirit; Palmer & Co., Ltd., for soft soap. *India Office*.—Cuxson, Gerrard & Co., Oldbury, for bandages; Standardised Disinfectants Co., for cresol; Burroughs Wellcome & Co., for syringes. *Crown Agents for the Colonies*.—Burgoyne, Burbidges & Co., for drugs and chemicals.

Camberwell Guardians.—W. H. Bailey & Son, for trusses, single inguinal, 2*s.* 9*d.* each; double, 4*s.*; single scrotal, 5*s.*; double, 8*s.* 6*d.*; cotton elastic stockings, 3*s.*;

knee-caps, 2s. 6d. W. S. Rothbands & Co, Manchester, for water-beds at 5s. per lb.; waterproof sheeting, 4s. 6d. per yard. In a report to the Board the medical superintendent at the Infirmary (Dr. Keats) stated that the Board could not expect to purchase good and lasting water-beds at less than 4s. 6d. per lb.

From Various Courts.

At Tunbridge Wells on September 17, Margaret McNeill, nurse, was sentenced to three months' hard labour for a series of thefts, including toilet preparations value 6s. 2d., from Mr. Thomas G. Bating, chemist and druggist, 16 Calverley Road, Tunbridge Wells.

The East Grinstead (Sussex) Bench on September 16 placed Bernard Wellun, a youth in the employ of Messrs. W. H. Dixon & Sons, chemists, East Grinstead, on probation for six months for stealing 4s. from the prosecutors' shop in London Road. Mr. Percy George Dixon said that Wellun admitted having taken two sums of 4s. and 6s. from a drawer at prosecutors' London Road pharmacy.

At Portsmouth on September 13, Wm. Wallis Cox was fined 2l. for defrauding two small shopkeepers by selling cards of pill-boxes containing peas instead of pills (*C. & D.* September 14, index folio 426). Evidence was given by Detective Bowyer on the sprouting of the supposed pills after soaking in water, and by Ellen Caroline Ruff, of Portsmouth, who purchased a card for 1s. 3d. Prisoner said he went out canvassing with the cards on behalf of a man named Clements, who told him that he paid 1s. 6d. a lb. for the pills.—Further charges against Cox were heard at Gosport on September 17. The Magistrates stigmatised prisoner's conduct as a "wicked, cruel fraud," and sentenced him to a month's imprisonment in the second division on each of two charges, the sentences to run consecutively.

An inquiry was held at Leicester on September 13 relative to the death of May Langton (20). The evidence showed that the girl had visited Mr. H. Bowerman, who carries on a dental business in Humberstone Road, Leicester, and had six teeth extracted under the influence of a local anæsthetic containing codrenine and other ingredients, equal to a fifth of a grain of cocaine. On September 10 she had four more teeth extracted under a similar quantity of local anæsthetic. Shortly after leaving the surgery, which she did apparently in excellent spirits, the girl collapsed in the street and died. Dr. Harold Ingham, assistant house-surgeon at Leicester Infirmary, where the girl died, deposed that the girl physically was in such a very debilitated, septic condition that a shock of any kind might have caused her death. He made a *post-mortem* examination of deceased, and found the internal organs debilitated and in a highly septic condition. There was some atheroma of the aorta, and the heart muscle showed in one place a degeneration. There was an abscess and pus in one kidney and pus in the other, and also pus in the lower organs. The girl was in a condition that a shock might cause death, and mere external examination, even by a doctor, would not show the septic condition of the deceased. The methods of the operator had been quite correct, and it would be quite impossible for him to detect the girl's condition. The jury returned a verdict in accord with the medical evidence, adding that there was no negligence on the part of the dental operator.

Athletics and Sport.

ALLENBURYS C.C. proved much too strong for Burgoyne Burbridges C.C. in their last League match of the season, played at Wadham Lodge on September 14. The scores were: Allenburys, 94 runs for five wickets, declared; B.B., 19 runs. G. Porter took six wickets for 7 runs for the winners, who have gone through the season without defeat.

THE FOOTBALL SECTION of the Edinburgh Pharmacy Athletic Club held its annual meeting on September 12, when it was stated that the club had been admitted to the Edinburgh, Leith, and District Week-day League. The following officials were appointed: *Hon. Secretary and Treasurer*, Mr. Reilly, 19 South Clerk Street, Edinburgh; *Committee*, Messrs. Gillespie and Taylor.

IRISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

The business of the late Mr. Robert Smith, J.P., druggist, Foyle Street, Londonderry, is being carried on under management.

Mr. Richard Forsythe, manufacturer of "Cumio," a "medicine" for consumption, has been co-opted a member of Cavan Urban Council.

Messrs. Hayes, Conyngham & Robinson, Ltd., are opening a new branch in Henry Street, Dublin. There are rumours of a similar expansion in the vicinity of the Bank of Ireland.

Mr. O'Donnell, Ph.C., Dublin, has been appointed instructor of pharmacy at the Technical Schools, Kevin Street, Dublin, at a fee of 5s. per hour for two hours on two days in each week during the winter session.

Mr. Gerald D. Frizzell, son of Mr. W. A. Frizzell, Ph.C., L.R.C.P., Waterloo Place Pharmacy, Londonderry, has passed the Intermediate examinations (Junior grade) with honours, taking first place in German and fifth place in French, besides the bronze medal in his grade and money prizes.

Mr. William Urton Smith, Ph.C., who has for some years been on the staff of Messrs. Hayes, Conyngham & Robinson, Ltd., has been appointed a director of the company. Mr. Smith is a Scotchman, but passed the Minor examination from Belfast twenty years ago and the Licence examination at Dublin two years later.

The Ballymena Guardians decided on September 14, by a large majority, to accede to the application of Mr. Jas. Acheson, Ph.C., the compounder of medicines, to be placed on a graduated scale of salary. The salary was fixed at 52l., rising to a maximum of 72l. by 4l. every five years, the increase to be retrospective from the date of Mr. Acheson's appointment in 1897.

Mr. Matthew McDonald, M.P.S.I., 122 Donegall Street, has lodged a claim with the Corporation of Belfast for 15l. compensation for the breaking of a plate-glass window by a stone thrown while a party procession was passing. A similar claim, for 6l., has been made by Dr. Blewitt for injury to a window in his medical hall, 114 Newtownards Road. The Recorder will hear the claims at the next sessions.

The Local Government Board has written the Bawnboy Board of Guardians regarding the recoupment for medicines and medical and surgical appliances obtained for use in the house during the past half-year. They point out that the irregularities appear in the file and request that care be taken to guard against their recurrence. The Clerk of the Board has explained that the mistake must have arisen from the contractor's failure to enter one particular item as supplied.

Illicit Methylated Spirit.

At Moville, co. Donegal, Petty Sessions, Alexander Butler, a large sheep-farmer, was prosecuted by the Excise authorities for having on August 20 unlawfully deposited and concealed a jar containing a quantity of illicit spirits. Mr. John A. Hamilton, solicitor, pleaded guilty on behalf of the defendant. Mr. Butler, he said, was largely engaged in the sheep trade and had often to deal with a disease in the flocks known as "fluke" in the liver. As a remedy he used a mixture of spirits, garlic, and turpentine, and that accounted for the small quantity of the former that was found. He (Mr. Hamilton) said he had ascertained that the mixture was a recognised cure, and he strongly urged that the mitigated penalty be recommended to be reduced to 6l. The Magistrates imposed a fine of 100l., mitigated to 25l., with a recommendation to the Revenue authorities that it be further reduced.

THE IDIOTIC ADVICE.—Dentist: "Have you been anywhere else?" Patient: "I went to see the chemist in our village." Dentist: "And what idiotic advice did he give you?" Patient: "He told I to come and see you, sir!"

SCOTTISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Aberdeen and the North.

Mr. James Sim, chemist and druggist, 48 Powis Place, Aberdeen, before leaving last week for a situation in Ceylon was entertained in the Empress Café by his fellow-assistants and presented with a handsome dressing-case. Reference was made to the valuable services Mr. Sim had rendered in the formation of the new Assistants' Association, and especially of their football club.

Since his appointment as Public Analyst for Aberdeenshire, Mr. J. F. Tocher, Ph.C., B.Sc., F.I.C., has found it difficult to give that personal attention to his pharmacy in Peterhead which he has been accustomed to, and he has now disposed of it to Mr. James Walker, chemist and druggist, Ellon. The Peterhead pharmacy is a double shop in a building erected by Mr. Tocher, with residence on two floors above. The premises include several apartments at the back, among them a bacteriological and a chemical laboratory, while a well-equipped electrical department for x-ray work and



MR. J. F. TOCHER.

other medical applications of electricity is a special feature, and will be continued by Mr. Walker in association with the medical practitioners of the district. Mr. Tocher's severance from Peterhead will cause much regret. He has been in business there since he passed the Minor examination early in 1886. He first occupied more modest premises next door (now a saddler's), and there he fitted up a small laboratory in which he did his Major work and part of that required for the Institute of Chemistry examinations, this being supplemented by two sessions at Mason's College, Birmingham, under Sir William Tilden. Mr. Tocher's academic and professional distinctions are so numerous that his success as "Tocher the drogist" (the affectionate appellation of the local fisherfolk) is apt to be overlooked. His retirement from retail pharmacy does not, however, mean dissociation from the craft. He has laboratories in Aberdeen, and will reside in that city.

Edinburgh.

Mr. Duncan McLaren, chemist and druggist, Pitt Street, has given up business on his own account.

It is rumoured that a well-known chemist intends opening another establishment in Lothian Road, where extensive alterations have recently been in progress.

Messrs. Boots, Ltd., are making a big show of extract of beef, and from all accounts several firms are going to advertise largely similar preparations in Edinburgh. "Avoid Chills" is part of one of Messrs. Boots's advertisements.

During the B.P.C. meeting here a Scottish pharmacist occupied a room in an Edinburgh hotel adjoining that of a member from the South of England. On returning from Dunfermline on the Wednesday evening, both repaired to their rooms to dress for the *café chantant*. The Scotsman, not being so conversant with the ways of the Conference as the other, was doubtful as to the proper garb for the occasion. Accordingly he put his head into the Englishman's room, and the following conversation occurred:

"I say, what kind o' a sark will ye be wearin' the night?"

"What kind of a *what*?" queried the Englishman.

"A *sark*," replied the Scot.

"What the dickens is that?" asked the Southroner.

"D'ye mean tae say ye dinna wear sic a thing?" retorted the Scot.

Explanations followed, and both appeared at the function properly attired.

Glasgow and the West.

The meetings of the Glasgow and West of Scotland Chemists' Association during the coming winter promise to be progressive and instructive. The Session is to be opened with a social evening and dance.

Mr. Fred Chisholm, chemist and druggist, has opened a stationer's business on his own account in Hyndland Road, Glasgow. Mr. Chisholm gave up the drug business a year or two ago in order to take up a situation with the firm of More & Co., stationers, in which his brother is a partner. A third brother, also a chemist, has succeeded him.

In Glasgow 1,056 samples were taken under the Sale of Food and Drugs Acts during 1911. These included twenty-four of cream of tartar and twenty-one of tartaric acid. All the samples were satisfactory as regards lead and arsenic, which were specially tested for, but one sample of cream of tartar was slightly below the B.P. standard, and one proved to be accidentally admixed with tartaric acid. No proceedings were instituted. Sixteen samples of cinnamon examined were certified as genuine, but of twenty-three ginger samples nine were reported to contain excess of siliceous matter ranging from 2.82 to 6.64 per cent.

FRENCH NEWS.

(From the "C. & D." Paris Correspondent.)

FOOD AND DRUGS ACT IN THE WORKING.—The Minister of Agriculture has addressed a letter to the Wholesale Druggists' Association, stating that (after consultation with the Minister of Commerce) he has decided to modify the organisation of the Permanent Technical Committee appointed to examine the scientific questions raised by the application of the 1905 Anti-Adulteration Act. The members will henceforth be nominated for a term of three years, and the committee include three sections: (1) Food and beverages, (2) manure, seeds, and agricultural produce, (3) medicaments. Each section may deliberate separately with one of the Vice-Presidents in the chair. The Director of the Paris School of Pharmacy is, by virtue of his office, Vice-President of the third (pharmacy) section. The President of the Wholesale Druggists' Association is also, by virtue of his office, a member of the committee.

Proposed New Pharmacy Law.

ONE of the features of the last annual meeting of the General Association of French Pharmacists was the examination and discussion of a new draft Pharmacy Act. The text has been sent to the members of the "Pharmaceutical Group" of the French Parliament (Deputies and Senators who are or have been connected with the profession) and to the Professors of the Schools of Pharmacy, as well as to the various Pharmaceutical Societies throughout France. It is hoped that (as "in the multitude of counsellors there is wisdom") a practical and final revision may thus be effected, and a text embodying as far as possible the desires and hopes of French pharmacists may be laid before the Chamber of Deputies. The Secretary of the General Association has also issued a circular to the various Pharmaceutical Associations, begging them to draw the attention of their local Parliamentary representative to the present situation of the profession and the importance and nature of the new Law. The text is intended to replace, practically speaking, all the ancient existing measures, not only the Law of Germinal, but the Royal Declaration of April 25, 1777, the Laws of April 14, 1791, 29 Pluviose and 25 Prairial, An XIII. (1805), the Decree of August 19, 1810, and the Ordinance of August 8, 1816. It may therefore be preferable to outline briefly the majority of the thirty-three clauses of the present project:

(1) (a) The retail sale of medicaments for human or veterinary use, or of any "substance or preparation to which medical or curative virtues are attributed," is reserved to pharmacists. (b) The Paris Academy of Medicine to indicate and the Government to decree which mineral waters shall be reserved for sale by pharmacists.

(2) The pharmacist to possess a French diploma, but "equivalence" of preparatory diplomas may be accorded to foreigners.

(3) Pharmacies to be registered at the Prefecture (or Sub-Prefecture) and the local Law Court. Every act of sale of a pharmacy to be drawn up by a notary, who is to assure himself that the purchaser is a qualified pharmacist.

(4) Pharmacy students and "internes" of some years' standing may be authorised by a Prefect to act as *locum tenens* for a widow or otherwise for not more than three months.

(5) Every pharmacist to be proprietor of his own pharmacy (*exceptis excipiendis*).

(6) To carry on no other trade or any profession which forces him to be "habitually far from home."

(7) To label every medicament with his name and address, and to add a special label to those intended for external use only.

(8) He may have as many assistants as necessary, but is responsible for their errors, and, should he have more than three, must engage a qualified man per each trio of unqualified assistants.

(10) No "company pharmacy" to be allowed unless every partner is qualified; and, if so, none of the partners may have another pharmacy of his own. Article 11 deals at length with wholesale pharmacy.

(12) This forbids the sale of medicaments in streets, fairs, and markets, even by qualified men.

(13) Widows to be allowed to continue business for twelve months, or three years if they have a son who is already a pharmacy student. Managership also admitted in case of illness.

(14) Forbids "compèrage" (agreements between doctors and pharmacists, etc.).

(15) Prohibits the simultaneous exercise of more than one profession. Doctors and veterinary surgeons may only deliver medicaments in their commune (parish) if at least eight kilometres from a pharmacy. They must deliver a prescription in the usual way with every medicament thus supplied.

(16) Treats of secret remedies, etc.

(17) Provides that prescriptions shall be written clearly enough to permit of execution in any pharmacy; and that if the pharmacist claims the right to keep the prescription, he must give a certificated copy in exchange, if required.

(18) Pharmacists not to deliver except on prescription medicaments scheduled by the Codex Committee. The same Committee to draw up a list of medicaments which cannot be supplied without a fresh prescription being produced for each sale.

(19) This deals with herbalists.

(20 and 21) In these hospital pharmacies and "mutual" (benefit-society) pharmacies are dealt with.

(22) Is about the Codex.

(23) Concerns inspection of pharmacies.

Then come penalties. "A point about Switzerland," said a friend recently, "is that you know exactly beforehand how much it will cost you to break every local law and regulation, so you can suit your law-breaking to your means." The new Pharmacy Act unfortunately leaves a margin to the appreciation of the Bench. For instance, the pharmacist who fails to label his bottles, or who carries on some outside business (Clauses 6 and 7), who delivers a scheduled medicament without a prescription, or who does not possess the last Codex, may have to pay anything between 12s. and 4*l.*, according to the Magistrates' views of his case. For a rather larger sum (4*l.* to 20*l.*) one may neglect to register one's diploma, or leave a pharmacy in the hands of an unqualified man to some limited extent; one may even sell secret remedies, tout for orders or sell at fairs and markets, practise medicine (human or veterinary), dentistry, or even midwifery, at the same time as pharmacy. With an indulgent local Bench which could be relied upon to inflict a minimum fine, there seems an opening for an enterprising man with capital enough to wait for results. Finally, we have the pieces of heavy artillery—the fines of 120*l.* These are directed against those who practise without a diploma, or form business enterprises forbidden by the law, such as agreements with doctors, etc. . . . It is specially stipulated that doctors, dentists, midwives, and vets. who share pharmacists' profits should be punished on the same scale. It is suggested that the Courts shall have power (Art. 27) after conviction to order the closing of any pharmacy opened or managed contrary to the provisions of the law, and (Art. 28) to order certain offences to be publicly announced

by posters or newspaper advertisements at the expense of the culprit. Any offence repeated within five years gives the Court (Art. 29) power to double the maximum penalty specified, and to pass a sentence of from six to thirty days' imprisonment. For certain grave offences, the Magistrates can even (Art. 30) pronounce the temporary suspension or permanent revocation of the right of the duly qualified pharmacist or herbalist to "keep open shop." It is proposed to extend the action of the Act to the French Colony of Algeria, and to apply Clause 463 of the Penal Code to infractions of the law. There is no intention of changing the short individual laws relating to pharmacy, such as the revision of pharmaceutical education in France and the suppression of the second-class diploma, which have been voted during the past few years.

SOUTH AFRICAN NEWS.

(From "C. & D." Correspondents.)

"The Chemist and Druggist" is regularly supplied by order to all the members of the seven Societies and Associations of Chemists in British South Africa, as well as to other chemists in business there.

The Union.

MAILS.—The Union-Castle Mail Steamship Co., Ltd., on September 17 issued a circular intimating that the ocean mail contract has been concluded between the Government of the Union of South Africa and the company as from October 1 next. The basis of the agreement is, *inter alia*, that "the contractors shall observe the provisions of the Post Office Administration and Shipping Combinations Discouragement Act, 1911, of the Parliament of the Union." The deferred commissions to shippers hitherto paid by the company will accordingly be discontinued on and after October 1 next. On shipments outwards to Union ports the primeage of 10 per cent., where now charged, will be reduced to 5 per cent.; from Union ports homewards the 10 per cent. primeage will not be charged where that rate of deferred commission has been subsequently allowed.

Cape Province.

MASONIC.—Mr. J. W. Couldridge, chemist and druggist, Port Elizabeth, was on August 23 installed W.M. of Lodge Good Hope, No. 863 E.C., Port Elizabeth. The D.D.G.M. was present at the ceremony.

Natal.

WHALE OIL AS ANTIDOTE.—A dose of whale oil, administered by a police officer at Durban, proved a successful emetic in the case of a man who took strychnine in order to avoid arrest.

Transvaal.

BUSINESS ON THE RAND.—It is a long time since trade was at such a low ebb as it is in Johannesburg at present, writes a Johannesburg correspondent.

PERSONAL.—Mr. W. Easterbrook has again been successful in winning the first prize in the golf tournament arranged by the T.C.A.C.—Mr. J. W. Hull (Parke, Davis & Co.) has returned to Johannesburg from a prolonged visit to the Cape and Western Provinces.

SMALLPOX.—The outbreak of smallpox in Johannesburg is now well in hand, according to the official report of the M.O.H. Up to date seventy cases have been discovered, chiefly among coloured people. There has been a tremendous rush for vaccination, and the doctors at the various stations have never been so active.

BILLIARDS AND BUSINESS.—During the past few weeks the billiard tournament promoted by the Transvaal Chemists' Athletic Club has been in progress at the Johannesburg Club, by the kind courtesy of the directors, who made all entrants honorary members for one month. The arrangements were ably carried out by Messrs. F. Collins, W. H. Cross, E. W. Woods, and J. Linton (Hon. Secretary). The entries this year reached fifty, and as in previous years the tournament was a great success. The first prize, presented by Messrs. Lennon, Ltd., was won by Mr. C. Cowie, who also receives

the prize presented by the President (Mr. J. Christie). The second prize was won by Mr. W. J. Smith, and the third prize by Mr. W. H. Cross.

Natal Pharmaceutical Society.

A COMPLIMENTARY DINNER was given on August 21 at the Esplanade Restaurant, Durban, by local chemists to Mr. D. S. B. Anderson on the occasion of his being elected a councillor of the borough. Mr. E. B. Dunkerton (President of the Natal Pharmaceutical Society) occupied the chair, and was supported by Mr. F. Stranaek, Mr. I. K. Sim, Mr. Fleming Johnston, Dr. Murray Gray, Mr. G. A. Champion, Dr. Howden, Mr. S. K. Elgie, Mr. W. H. Goodbrand, and others, between thirty and forty being present. In proposing the toast of "Our Guest," the Chairman said that "as a member of the Pharmaceutical Society Mr. Anderson had always been eager and anxious to do anything good for the sake of the craft. He had been the energetic Secretary of the Society for a number of years, and represented the chemists of Natal at the Bloemfontein Conference of Pharmaceutical



MR. ANDERSON.

Councils some time ago, when called together by the Government to consider the Pharmacy Bill. His experience in committee work had also been considerable, and altogether, from what he (the Chairman) knew of him, he could venture the opinion that he was a man who would be to some extent amenable to the influence of people with whom he came into contact to imbibe good ideas, but sufficiently a man of his own mind to put his foot down on questions upon which he had made up his mind." Mr. Anderson, in reply, said that he appreciated to the fullest extent the honour paid to him. It was most encouraging, when launching into a new sphere of public life, to feel that one had the hearty approval and support of one's *confrères* and those with whom one has been working for a considerable number of years. As the Chairman had said, for quite a number of years he had taken an active and keen interest in affairs pharmaceutical, and in a way had made them his hobby. During the same period he had also been following very closely the municipal work of the town, and it had been his aim to attain to the position of a councillor of this borough for a considerable time. Mr. S. K. Elgie proposed the toast of "The Pharmaceutical Society," to which Mr. G. A. Champion replied; and the Vice-President of the Society (Mr. Morris Stranaek) proposed the toast of "The Visitors," which was responded to by Dr. Murray Gray. An excellent musical programme was rendered during the evening.

INDIA AND THE EAST.

(From the "C. & D." Correspondents.)

IPPECACUANHA IN MALAYA.—In the annual report on Agriculture in the F.M.S. in 1911, the Curator states that 110 plants were obtained from the Superintendent, Royal Botanic Gardens, Sibpur, Calcutta. The plants are doing well. As it is a slow-growing crop it will be some time before cuttings can be taken to establish a stock.

A SOAP DISPUTE.—The District Judge of Colombo delivered judgment on August 28 in the case in which a German firm carrying on business under the name of George Dralle sued M. M. Ebramjé. The plaintiffs, who are soap manufacturers and exporters to Ceylon of "Lion Soap," alleged that the defendant infringed their trademark in selling "Jockey Club Soap"; that the "Lion Soap" became known as "silk wrapped soap"; and that the "Jockey Club Soap" has been packed and got up in imitation of the "Lion Soap," and that large quantities of it have been passed off as the plaintiffs' soap, and the defendant has gained large profits. The Judge found that the defendant's use of the boxes, label, covers, and wrappers was calculated to deceive the public, and an injunction was granted restraining the defendant from passing off soap not of plaintiffs' manufacture, and ordering the soap boxes, labels, etc., to be destroyed.

TRADE REPORTS for 1911 dealing with South Africa (Cd. 6405, 3*l.*), Australia (Cd. 6404, 2*½* *l.*), and British India (Cd. 6392, 1*s.* 1*d.*) have been issued this week.

COLONIAL AND FOREIGN NEWS.

AMERICAN PHARMACEUTICAL ASSOCIATION.—The annual meeting was held at Denver on August 19, under the presidency of Mr. John G. Godding, Boston, Mass. The reports showed that the Association is in a satisfactory condition, its investments now amounting to \$56,000.

SACCHARIN SMUGGLING.—A padded furniture van of the newest style, heavily "cushioned" and full of modern furniture, was "passed" in the ordinary way at Basle Station recently for Germany. On the German frontier the Custom House officials discovered that the van weighed 10,000 lb. more than the weight declared, and suspicion was aroused. When the van was carefully examined it was found that the modern cushions consisted of bags of saccharin worth a very large sum. The van was confiscated.

THE PANAMA CANAL.—The approaching completion of the Panama Canal has directed the attention of many British manufacturers and traders to the desirability of making arrangements in advance of its opening for increasing their trade. In this connection it may be stated that information has been received by the Board of Trade to the effect that certain foreign manufacturers are carrying out an organised campaign in South America with a view to capturing the local markets in such countries as Bolivia, Peru, Ecuador, Colombia, etc., at the earliest possible opportunity. As an instance, it is said that one important firm of Continental manufacturers have despatched a commissioner to investigate and report on the prospects and development of the countries named.

SOYA-BEAN INDUSTRY AT STETTIN.—A company formed in 1910 at Stettin with a capital of 75,000*l.* for the purpose of producing oil, oil cake and meal from Manchurian soya-beans, commenced work at the beginning of April 1911, but four weeks later work was stopped owing to a strike. In June part of the factory was destroyed by fire; the plant for extracting the oil was restarted in July, but the presses did not resume work until November. About 20,000 metric tons of soya-beans was imported direct from Manchuria; of this amount 11,500 metric tons was forwarded to Hamburg on account of the stoppage of work here. Soya cake and meal have found a good sale in German agricultural districts, and soya oil is now largely used in the manufacture of soap in place of linseed oil.

BELGIAN PHARMACOPŒIA.—The Belgian Pharmacopœia Commission has issued the draft of monographs for articles to be included in a supplement to the Pharmacopœia. The new preparations comprise:

Aspirin, veronal, picric acid, ammonium bromide, coca-leaves, pyramidon, urotropine, methylene blue, dionin, heroin hydrochloride, benzonaphthol, atoxyl, arphenal, oxygen, novocaine, phenolphthalein, sparteine sulphate, tannigen, solution of aluminium aceto-tartrate, fluid extract of coca, ext. fluid. iodotannicum, syr. iodotannicus, zinc-oxide paste, and Lassar's paste.

A method for the estimation of theobromine is to be added to the monograph on diuretin, and in the case of fluid extract of hydrastis, instead of requiring a residue of 20 per cent., it is to have a content of 2 per cent. of hydrastine. A monograph on the preparation of solutions for hypodermic, intramuscular, intravenous, and spinal injection has also been drafted.

A KNOWLEDGE of Continental pharmacy is essential to every pharmacist; it is an element of trade success.

SEYCHELLES CINNAMON-BARK.—The quantity exported from the Seychelles in 1911 was 964 tons, of which 754 tons was consigned to Hamburg and 152 tons to Holland. Cinnamon-trees were introduced, among other species, from the Dutch Indies by order of M. Poivre, Intendant of the French Colonies beyond the Cape of Good Hope, about 1775, and cultivated in the Royal Gardens on Mahé. The cultivation was abandoned shortly afterwards, but the trees spread through the forests and were neglected until 1908. The bark is now roughly harvested and dried for export, realising locally about 1*d.* per lb. Attempts are now being made to prepare quills, and probably preference will be given in future by shippers to the bark peeled off young shoots. But there is little likelihood of the prepared quills ever competing on equal terms with Ceylon.

LEGAL REPORTS.

TRADE LAW.

A Chemist's Shop-front.—At the Coventry County Court on September 11, Frederick Foster, a local architect, brought an action for fifteen guineas' fee for plans of a new front at the shop of Mr. Evan Parker, chemist, Hertford Street, Coventry, who counterclaimed 40*l.*—5*l.* a week for eight weeks' delay on the completion of the builder's work, which sum, it was contended, the plaintiff ought to have deducted from the builder's certificate.—Mr. Parker opened business in Coventry two years ago, and in the conversion of the shop he took was kept out of the premises for two months beyond the time named for completion of the contract. The Judge held that the architect was in the position of an arbitrator in the matter and held a discretion to certify the builder's account in full; notwithstanding the delay which took place. He therefore gave judgment for the claim and disallowed the counterclaim.

Barton v. Hertz.—In the City of London Court, before Judge Rentoul, K.C., on September 17, P. C. Barton & Co., Ltd., advertising agents, Aldwych, sought to enforce payment of 22*l.* 17*s.* 1*d.* due from Mr. Jacob Hertz, drug-merchant, trading as Hertz & Co., 9 Mincing Lane, E.C.—Judge Rentoul, K.C., said that the defendant had been ordered to pay 2*l.* a month. Was that on his own offer?—Plaintiffs' representative said it was not. Defendant was quite able to pay the debt. He lived in a very good house in the best part of Sutton, and had always paid previous instalments under pressure. Judge Rentoul asked if the witness had seen the house?—Plaintiffs' representative said he had not. He knew about it from people who travelled up with the defendant every morning from Sutton.—Judge Rentoul asked what other evidence there was of the defendant's means.—Plaintiffs' representative replied that the defendant was still carrying on business in a successful way as a chemist and druggist's traveller, he believed. He was an agent for Continental firms and perfumers. He did not know if the defendant had any family or kept a servant.—Judge Rentoul said there was very little evidence of the defendant's means on which he could act. Defendant's rent might or might not be paid for all he knew. For whom did the defendant travel?—Plaintiffs' representative replied that the defendant had his own business. He traded as Hertz & Co. It was a one-man business. Defendant had an office. There were no other names up on the office, he believed, but there might be.—Judge Rentoul said he could not make a committal order against the defendant on the evidence before him. He would adjourn the case for a week, and the plaintiffs must try and get evidence first as to whether he had an office of his own. The defendant's name being on the door did not mean anything. That could be done for 2*l.* or 3*l.* If defendant had a servant in the house, that would be a piece of information that would be useful, and it might be ascertained if he was on the telephone.—Plaintiffs' representative said he was.—Judge Rentoul said he would adjourn the case to enable the plaintiffs to make better inquiries.

High Court Cases.

Unless when otherwise stated these cases have been heard in the High Court of Justice, London.

"BROWNIE" AND "KODAK."

Mr. Justice Avory, in the Vacation Court on September 18, had before him several motions by the Kodak Co. in which an injunction was asked for to restrain the use of the names "Brownie," "Kodak," etc. For Kodak, Ltd., Mr. Kerly said that in the case against the Churchill Studio and Amateur Supply Stores it had been agreed that an injunction should be granted and an agreed sum paid for damages and costs. Similar orders had been agreed upon in cases against Prentice; J. Gibbs & Sons, Ltd.; Parris & Greening; and Flatman. On behalf of the defendant Flatman, it was stated that he was personally innocent and neither knew of, nor authorised, the substitution of any one else's goods for those of Kodak, Ltd.—A motion by the plaintiff against Holmes was ordered to stand over.

FAT-REDUCING ADVERTISEMENTS.

In the Vacation Court on September 18, Mr. Justice Avory had before him the case of Cook v. Sweet & Little, upon a motion by the plaintiff for an interlocutory injunction to restrain until the trial or further order an

alleged passing-off and infringement of copyright by the defendants.

Mr. Bramwell Davis, K.C., in support of the motion, said that as originally launched it was limited to copyright, but leave was given to amend so as to include "passing-off," and he now asked for relief in respect of both. The parties were the proprietors of secret processes for reducing fat without the aid of drugs, and the plaintiff's was known as the "Margory Hamilton Cure." Plaintiff complained that without actually taking that name the defendant had copied the greater part of an advertised pamphlet which explained the treatment almost verbatim, and had also copied the advertisement issued by the plaintiff through the daily Press. The result was that people had been in doubt as to which was the plaintiff's cure. The plaintiff had letters from ladies who had been deceived. He submitted that the defendants were doing acts which were calculated to lead the public to believe that their cure was the plaintiff's cure, and that therefore plaintiff was entitled to the interlocutory relief claimed.

Mr. Ingpen, K.C., for the defendants, contended that there was no principle upon which the plaintiff could succeed in respect of infringement of copyright. He contended that in the circumstances there was no legal right in the plaintiff to restrain the defendants doing what they had done.

At the conclusion of the arguments of counsel his Lordship directed the motion to stand over till the second motion-day next sitting, saying that as at present advised he was not satisfied that any legal rights of the plaintiff had been infringed in this case.

Mr. Ingpen stated that the defendants had altered the form of their advertisements and did not intend to go back to the original form.

Medicine-stamp Act, 1812.

UNLICENSED AND UNSTAMPED.

At the Leeds City Police Court on September 18, Orlando White Greenwood, Gledowser Place, was summoned at the instance of the Commissioners of Customs and Excise for selling dutiable medicines unstamped and without a licence. He pleaded guilty, and was fined 10*s.* and costs on a first summons, and ordered to pay the costs on another three.

HEREALINE.

At Hinckley Petty Sessions on September 12, James Higginson, patent-medicine vendor and boot-manufacturer, Hinckley, was summoned at the instance of the Commissioners of Customs and Excise for selling on July 13 patent medicine without having paid the necessary duty on the same.

Mr. A. D. Stocks, of the Solicitor's Department, stated that the summons was issued under Section 2 of the Act. Defendant was the owner of two preparations—one known as a specific ointment for blood-poisoning, and the other as herbaline. These had been sold for about twelve years, and the duty had been paid on the specific ointment, but not on the herbaline. He did not wish to press the case, as defendant would plead guilty but asked that there should be a conviction to stop unfair competition against persons who had paid the duty on their goods. There had been considerable loss to the Revenue from the sale of the article, which was large.

Mr. E. G. Fowler, who defended, said that Mr. Higginson was well known and respected in the district, and if the revenue was lost for ten or twelve years it was the fault of the Revenue officers. Defendant was surprised to find that he was liable, being under the impression that the wording of the circular sent with the ointment absolved him. In the case of the specific the label said the ointment would cure blood-poisoning, but that with the herbaline merely stated that it was ointment which could be used with various complaints, and it did not say that it would cure them. The prosecution was taken under an Act one hundred years old, and therefore there was little wonder that the defendant made a mistake.

The Magistrates imposed a fine of 2*s.* 6*d.*, with costs 9*s.*

TRADE NOTES.

LIQUORICE AND MENTHOL PELLETS.—Mr. E. Ernest Jackson, of Crediton, is putting up his liquorice and menthol cough-pellets in enamelled-metal boxes, to retail at 3*d.* each, which go nicely into the waistcoat-pocket. These pellets are cushion-shaped and are made of pure liquorice extract combined with menthol.

HALL'S WINE.—With regard to the bonus announcement in the *C. & D.*, September 10, by Messrs. Stephen Smith & Co., Ltd., Bow, London, E., we learn that chemists to whom the official numbered free order is presented may honour it without a doctor's signature provided the purchaser puts full name and address on the order.

DANYSZ VIRUS, LTD., 52 Leadenhall Street, E.C., inform us that their liquid form is the medium chosen by the French Government for combating an invasion of rats in certain agricultural districts, and 8,000*l.* has been allocated for the purpose, with the result that the Paris Pasteur Institute is turning out hundreds of litres daily.

EMETINE SALTS.—Messrs. Whiffen & Sons, Ltd., Battersea, London, S.W., draw attention in our advertisement columns to the fact that they have manufactured emetine hydrochloride and emetine hydrobromide during the past fifteen years. This in view of their increased use in dysentery, a fact which chemists in the East should note when ordering.

HYDROQUININE HYDROCHLORIC has been placed on the British market by Messrs. Widenmann, Broicher & Co., 1 Fenchurch Avenue, London, E.C., as the agent for Messrs. Zimmer & Co., Frankfurt. Hydroquinine contains two hydrogen atoms more than quinine, and the manufacturers prepare it synthetically from quinine. It has the same therapeutic properties as quinine, but is much more soluble, the hydrochloride dissolving in half its weight of water.

AN EXPECTORANT THROAT-TABLOID.—Messrs. Burroughs Wellcome & Co. have produced a new bronchial and laryngeal remedy in tabloid form, which contains minute doses of ipecacuanha, heroin hydrochloride, epinine, and benzoic acid in a 4-gr. tabloid of demulcent base, flavoured with wintergreen. One of these dissolved slowly on the tongue relieves the tickling of the throat which is sometimes so difficult to get rid of, especially when it is due to congested capillaries. We would suggest a flavour alternate to wintergreen—say a trace of peppermint or anise.

THE India Rubber, Gutta Percha and Telegraph Works Co., Ltd., Silvertown, London, E., are supplying retailers

A VARIED ASSORTMENT
: : WITHIN : :
ALL SIZES
ALL PRICES

GET
A RUBBER
HOT-WATER BOTTLE
AND SLEEP IN
COMFORT

The
"SILVERTOWN"
BOTTLE
IS THE MOST
RELIABLE

of their "Silvertown" hot-water bottles with an attractive window-bill, printed in two colours on buff ground. The bill measures 12½ in. by 10 in., and it can be obtained from the company on application.

THE "REGINA MAY" SOAP which Price's, Ltd., Battersea, London, have recently put on the market (see *C. & D.*, September 7, index folio 410) is a pure white and hard-

milled soap in oval tablets, deliciously perfumed. It is made of the best quality base, and is as pleasant in use as it is lasting. Each cake is wrapped with a sheet of Japanese tissue-paper and crinkled paper, outer strapped by a band bearing a portrait of Queen Mary on one side. Three of these in a box make an attractive picture. The soap retails at 3½*d.* per tablet, and is good value at that, while it shows the retailer a profit that makes his handling it worth while.

WINTER WARES FOR CHEMISTS.—Messrs. W. B. Cartwright, Ltd., Rawdon, near Leeds, who have so rapidly

come to the front as manufacturers of compressed tablets, submit to us specimens of their latest productions and of the showcards which they supply to their customers. One of these we reproduce. The original is 12 in. by 10 in., and is printed in red and black. There are also cards for "Otwul" and "Red Pod" medicated wadding and for 3.B. Pine-tree Tablets. These tablets and the bronchial lozenges are elegantly and neatly packed in enamelled-metal boxes to retail at 6*d.* per box.

The medicated waddings should sell well during the winter season, as they are good value and efficacious for the relief of pains in the joints and chest which are produced by cold. Being made of gamgee tissue, these waddings are economical and lasting in use. The combination, in the case of "Otwul," of methyl salicylate with capsicum, is an advantage for rheumatic cases. The waddings are neatly packed, and cost the retailer 3*s.* 9*d.* per dozen packages, the size being that usually retailed at 1*s.*



SPECIAL PURCHASE OF BRONCHIAL LOZENGES

CURETS
TOLU
COLTSFOOT
ANISEED
LICORICE
MINT

MADE FROM

2

CURETS
TOLU
COLTSFOOT
ANISEED
LICORICE
MINT

THEY WARM THE CHEST.

PERSONALITIES.

Notes for this section sent to the Editor should be authenticated and must not be in the nature of advertisements.

MR. A. S. DEAN, Ph.C., 40 Low Street, Keighley, has been elected President of the local Photographic Association.

MR. RICHARD BAKER is now taking Mr. S. Deverson's ground for Messrs. Gale & Co., Ltd., 15 Bouverie Street, London, E.C.

MR. JAMES BRINSMEAD, chemist, Melbourne, is now in London along with Mrs. Brinsmead. Mr. Brinsmead was for many years in business as a retail pharmacist in Melbourne, and retired a few years ago, but continues to have a practical connection with pharmacy as the manufacturer of a special ointment. Mr. Brinsmead is a Devonshire man, and passed the Modified examination before going out to Australia more than thirty years ago. He speaks highly of the country of his adoption, and of its future. There are splendid chances there for pharmacists, but he emphasises the necessity for success of a thorough knowledge of bookkeeping, stockkeeping, modern methods in all things, and unflagging enterprise, without which there is no more chance of prosperity in Australia than there is in the Old Country.

THERE is nothing beneath the dignity of a man that is not dishonourable.

RAT-POISON.—The safest and most effectual method of giving poison to rats is to mix it with dry meal and to place it as far down in the rats' burrows as possible; a tablespoon tied on a stick is useful for this purpose. Rats should be fed with dry meal for a day or two before they are given the fatal dose. Dry, frosty weather is the best time for poisoning rats.—*Country Life.*

LIMITED COMPANIES.

New Companies Registered.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907, and R.O., Registered Office.

LA PHYSIATRIE ETABLISSEMENTS DE MEDICATION NATURELLE Co., LTD.—Capital 10,000*l.*, in 1*l.* shares. Objects: To create and exploit establishments of natural medication for curing all diseases and ailments of the human body, etc.

DR. CHARLES A. TYRRELL, LTD. (P.C.).—Capital 1,000*l.* Objects: To carry on the business of manufacturers of and dealers in all kinds of surgical and medicinal appliances and medicines, chemists, druggists, etc. The first subscribers are A. J. Kaupron, 4 York Buildings, Adelphi, W.C., and C. J. Smith, 3 Ardberg Road, Herne Hill.

NEUTRIGEN, LTD. (P.C.).—Capital 600*l.* Objects: To carry on the manufacture and sale of "Neutrogen," and the business of chemists, druggists, chemical manufacturers, etc. The first directors are A. G. W. Cole (chairman), Hove; G. D. Turner, and G. W. B. Palmer. R.O., 25 Palace Chambers, Bridge Street, Westminster, S.W.

SYKES & SKIRROW, LTD. (P.C.).—Capital 2,000*l.* Objects: To carry on the business of cash chemists, druggists, opticians, dental operators, etc. The subscribers and first directors are W. Sykes, Prestwich, Lancs, dental operator and optician, and F. J. Skirrow, Atherton, Lancs, chemist and optician. R.O., 96 Market Street, Atherton, Lancs.

CYOL CHEMICAL Co., LTD. (P.C.).—Capital 1,000*l.* Objects: To acquire from Messrs. R. C. & J. B. Herman, trading as "R. & J. Herman, chemists," at 23 Parker Street, Liverpool, and 11 and 13 Warbreek Moor, Liverpool, "Cyol" tooth-paste and all "Cyol" preparations, etc. The first directors are R. C. Herman, J. B. Herman, and H. C. Grey.

BRITISH MEDICAL TOILET Co., LTD. (P.C.).—Capital 500*l.* Objects: To carry on the business of manufacturers and sellers of the preparation called "Dentoid," manufacturers of and dealers in all kinds of chemical, medical, or other preparations, chemists, druggists, etc., and to adopt an agreement with H. S. Freeman, who and H. W. Preece are the first directors. R.O., 33 Chancery Lane, London, W.C.

Company News.

STEWART & Co., CASH CHEMISTS, LTD.—Mr. S. Cole, of Sardinia House, Sardinia Street, Kingsway, London, W.C., ceased to act as receiver or manager on July 28, 1912.

SADLER & Co., LTD.—The report for the year ended June 30 last states that the available profit is 31,165*l.*, which it is proposed to deal with as follows: Interest on debentures and prepaid shares and for income-tax, 4,553*l.*; dividend at the rate of 7 per cent. per annum, less income-tax (of which an interim dividend of 3 per cent. was paid on April 10), 11,142*l.*; directors' and auditors' fees, 1,000*l.*; depreciation of plant, 6,000*l.*; to be added to reserve fund (making it 25,000*l.*), 5,000*l.*; balance to be carried forward, 3,468*l.*

Private Meeting.

A MEETING of the creditors of Mr. William Swan, pharmaceutical chemist, 111 Victoria Road, Dundee, was held on September 10, when a composition of 10s. in the pound, payable in instalments of 3s. 4*d.* in three, six, and nine months respectively was offered. The creditors present agreed to this, and to recommend absent creditors also to accept. The statement of affairs showed stock 102*l.* 15s. 2*d.* and fittings 75*l.*, less preferable claims 27*l.* 10s., leaving 150*l.* 5s. 2*d.* Ordinary claims amount to 293*l.* 15s., and there is also a bill for 127*l.* 2s. 8*d.* and a cash claim for 40*l.*, a total of 460*l.* 17s. 8*d.*, leaving a deficiency of 310*l.* 12s. 6*d.* The creditors include: British Diamalt Co., 6*l.* 12s. 11*d.*; Bourne, Johnson & Latimer, 12*l.* 11s.; W. J. Bush & Co., Ltd., 7*l.* 6s. 2*d.*; Butler & Crispe, 6*l.* 3s. 8*d.*; Oppenheimer, Son & Co., Ltd., 6*l.* 14s. 5*d.*; Baiss Bros. & Stevenson, Ltd., 24*l.* 19s. 11*d.*; Edme, Ltd., 5*l.* 3s. 11*d.*; Elliott & Sons, Barnet, 12*l.* 1s. 2*d.*; Southall Bros. & Barclay, Ltd., Birmingham, 5*l.* 18s. 11*d.*; C. To'kien & Co., Blackburn, 8*l.* 12s. 6*d.*; Wigglesworth & Co., Bolton, 8*l.* 12s. 3*d.*; North British Rubber Co., Ltd., Edinburgh, 6*l.* 5s. 5*d.*; J. C. Barr, Glasgow, 5*l.* 6s. 7*d.*; Comet Chemical Co., Ltd., Manchester, 7*l.* 4s. 6*d.*; Surgical Hosiery Co., Nottingham, 6*l.* 12s. 3*d.*; W. Houlder, Son & Co., Southall, 5*l.* 3s. 9*d.*

POISONING FATALITIES.

SIX deaths due to self-administrations of poisons have been reported during the week. In one case, however, a quantity of narcotic had been swallowed accidentally.

Camphorated Chloroform, used as a cure for toothache, was responsible for the death of Richard May (57), Audenshaw, Manchester. Twopennyworth of the preparation had been obtained from a local chemist, and deceased had accidentally swallowed some while applying it to a tooth. At the inquest the Coroner remarked that the case was the first of its kind he had come across.

Carbolic-Acid poisoning caused the self-inflicted death of Alice Pye (49), the wife of an Islington goods-checker.

Disinfectant.—At the inquest at Nantwich on William Bailey, rag-gatherer, who poisoned himself by taking some miscible coal-tar disinfectant, the West Cheshire Coroner, Mr. J. C. Bate, questioned Mr. H. S. Young, chemist and druggist, 52 High Street, Nantwich, who supplied the fluid, on its nature. Mr. Young stated it was coal-tar oil rendered soluble and non-corrosive by means of alkalies and resin. This process made it a more powerful germicide than pure carbolic acid, and less dangerous to human life. The Coroner: "You say this is a poison?" Witness: "It comes under the third section of the Poisons Schedule relating to poisonous compounds." Deceased, while purchasing the preparation, had asked for a red poison-label to be placed upon the container, and Mr. Young, in answer to further questions, said that the red label was used for stronger poisons. Dr. J. D. Munro said he did not know what the effect of taking some of the preparation would be. The symptoms were those of carbolic-acid poisoning. The Coroner, in summing up, said he was not prepared to say whether the disinfectant contained carbolic acid or not. Mr. Young was then recalled, and asked to name the disinfectant. Witness said it was called coal-tar carbolic acid, but its proper name is coal-tar oil miscible disinfectant, and its constituents are carbolates and cresolates, as well as quinoline, tar, and a host of other compounds. The Coroner remarked that probably an analysis would be too costly, but he intended to write to the Pharmaceutical Society and ascertain if the disinfectant is "one of those preparations that ought to be put on the Schedule of Poisons."

Hydrochloric Acid.—George Palmer (37), railway-carriage examiner, committed suicide at Cheltenham by taking this poison.

Potassium Cyanide was the suicidal agent used by Walter Thomas Belstead (35), ex-relieving officer, Islington, who was found dead on Hampstead Heath.

Salt of Lemon.—At Oldham a married woman named Rose Hurst poisoned herself with this chemical after drowning her six-months-old baby.

TRADE-MARKS.

Objections to the registration of any of the undermentioned applications must be stated on Form T.M. No. 7 (obtainable at Money Order Offices for *£*1) and lodged with Mr. Temple Franks, Comptroller-General, Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned.

The figures in parentheses refer to the classes in which the marks are desired.

(From the "Trade-marks Journal," September 11, 1912.)

Device of starry sky with word "STELLICIDE" on scroll; for a weed-killer (2). By T. Knight, High Street, Crowthorne, Berks. 344,132.

"HYPEROL"; for a medicine (3). By G. Richter, 63 Czerkesz-utca, Budapest. 343,485.

Device of horseshoe and hand with word "VITALACTINE" above and letters "C. R. H. S. & M." below; for a medicated food (3). By C. R. Harker, Star & Morgan, Ltd., Emmott Street, Mile End, London, E. 343,378.

"CINOL"; for vermin-destroying preparations (3). By T. Keating, 50-52 Union Street, Southwark. 343,498.

"RHEUMACIDOL"; for all goods (3). By F. Wilkinson, 60 Great Russell Street, Bradford. 343,896.

"TONKARSAL"; for medicinal chemicals (3). By Wilkinson & Dickinson, 11 George Street, Bath. 344,052.

"PHOSCASOL"; for medicinal chemicals (3). By the Belart Size and Chemical Co., Isthmus Road, Huddersfield. 344,122.

"TERMO"; for medicinal chemicals (3), and for perfumery, etc. (48). By Lever Bros., Ltd., Port Sunlight, Cheshire. 344,449/50.

"HISTOPIN"; for medicinal chemicals (3). By Nitritfabrik Aktiengesellschaft, 1 Marienstrasse, Copcnick, near Berlin. 344,704.

Device of lifebelt and lighthouse with word "FASTNET" ("Fastnet" disclaimed); for non-medicated apparatus, etc., for surgical or curative purposes (11). By the "Fastnet" Surgical Dressing Co., Ltd., 3 Clarendon Buildings, Horsell Road, Highbury, N. 343,567.

"HYDRODOT"; for a combination douche and ice-bag (11). By F. Schutze, Black Bull Works, Caledonian Market, London, N. 343,999.

Device of globe with words "WORLD'S STANDARD" ("World's Standard" disclaimed); for photographic papers (39). By J. J. Griffin & Sons, Ltd., Kingsway, London, W.C. 342,854.

"RYTOL"; for photographic paper (39). By Burroughs Wellcome & Co., Snow Hill Buildings, London, E.C. 344,234.

Device of two goats supporting shield with letters "DR. R. S."; for Saponin, a non-medicinal powder for use as a beverage (42). By H. R. Sthamer, 13-14 Alsterdamm, Hamburg. 343,664.

"DONNA-BEL"; for perfumery, etc. (48). By E. Oakey, 68 Farrington Street, London, E.C. 343,332.

Device of bulldog and kennel with words "RAILOX REPELS ALL INTRUDERS"; for a hair-preparation (48). By Milner's Chemical Co., 44 Robson Street, Liverpool. 343,689.

Circular label with words "ELK'S HEAD BRAND" and picture of same; for perfumery, etc. (48). By J. Barrington & Sons, Ltd., 202 Great Britain Street, Dublin. 344,489.

NEW BOOKS.

Any of these books printed in the United Kingdom can be supplied, at the published price, to "C. & D." subscribers on application (with remittance) to the Publisher, 42 Cannon Street, London, E.C. These notes do not exclude subsequent reviews.

Brooke, T. *Modern Retort Settings: Their Construction and Working*. 8vo. $8\frac{3}{4} \times 5\frac{1}{2}$. Pp. 212. 7s. 6d. net. (J. Allan.)

Craig, M. *Psychological Medicine: A Manual on Mental Diseases for Practitioners and Students*. 2nd edit. $9 \times 5\frac{1}{2}$. Pp. 486. 12s. 6d. net. (Churchill.)

Crowe, H. *Consumption: Treatment at Home and Rules for Living*. 3rd edit. 12mo. Pp. 36. 1s. net. (Simpkin.)

Emery, H. C. *Company Management: A Manual for the Daily Use of Directors, Secretaries, and others in the Formation and Management of Joint-stock Companies*. $8\frac{1}{2} \times 4\frac{1}{4}$. Pp. xii+278. 5s. net. (Effingham Wilson.) [This is the second edition of a book that has been favourably received. It begins with a table of the cases cited, then deals in parts with the following subjects: Existing joint-stock companies, formation of companies, allotment, change of name, general meetings, mortgages and charges, arbitration, private companies, penalties, winding-up by the Court, reconstruction, Limited Partnerships Act, 1907, and provisions relating to Scotland.]

Maiden, J. H. *A Critical Revision of the Genus Eucalyptus*. Vol. II. Part V. $12\frac{1}{4} \times 10$. Pp. 20, with four plates. 2s. 6d. (Sydney: New South Wales Government.) [A further three species of *Eucalyptus* (*E. olcosa*, *E. Gillii*, and *E. falcata*) are dealt with in the same way as in previous parts of this work.]

Mitlacher, Dr. W., and Tunmann, Dr. O. *Pharmakognostische Rundschau über das Jahr 1911*. $9 \times 5\frac{1}{2}$. Pp. 272. 7m. (Pharmazeutischen Post, Pestalozziggasse 6, Vienna.) [This is the second year of publication of this annual series of classified abstracts of articles relating to pharmacognosy. The arrangement into two parts is retained, the first or general portion dealing with biography, history, cultivation, botany, and chemistry; the second or special part deals with specific subjects, arranged in sequence of the natural orders of the drugs. The abstracts are well done, and form an accurate record of the advances made each year as regards pharmacognosy.]

White, J. A. *Company Transfer Work*. $8\frac{1}{2} \times 5\frac{1}{4}$. Pp. viii+108. 2s. 6d. net. (Effingham Wilson.) [This is a guide to the work of share registration and transfer departments of a limited company's office. It deals especially with duties of transfer department, applications and allotment, share register and share certificates, transfers of shares, transfer register, and allied subjects. In an Appendix (which constitutes about half of the book) there are specimen forms and rulings connected with the department.]

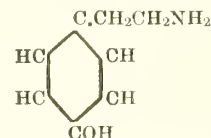
New Remedies.

Chavosote.—This is a new germicide, recommended in dental practice. It is the methyl ether of estragol, the principal constituent of tarragon oil. It is a liquid of aromatic odour, solidifying at 15° and boiling at 229° .

Elbone.—This body, recommended as an antipyretic specially suitable in tubercular cases, is cinnamoyl-*para*-oxyphenylurea. It forms white needles, melting at 204° . It is obtained by the interaction of cinnamic anhydride on *para*-oxyphenylurea.

Mucusane.—This body is recommended in cases of gonorrhoea, in the form of an injection. It is the zinc salt of diboro-orthoxybenzoic acid.

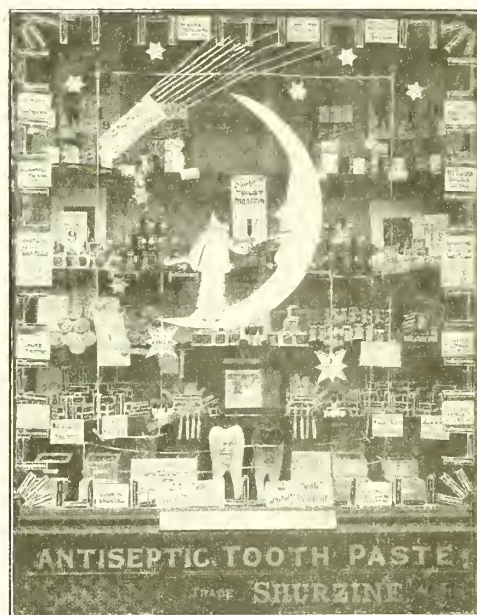
Systogene. This new synthetic is stated to be a perfect substitute for ergot of rye. It is *para*-oxyphenylethylamine, having the constitutional formula—



which is closely related to that of hordenine and, to some extent, adrenaline. It is a powerfully basic substance, melting at 160° . It is very insoluble, and is therefore best employed in the form of its hydrochloride.

CHEMISTS' WINDOWS.

New ideas for dressing windows are invited. Photographs of windows sent to the Editor for reproduction should be accompanied by notes on how the displays were arranged.



A "Comet" Window.

THE novel window-display made by Mr. H. E. Skyrme, chemist and druggist, of Messrs. Neve & Co., 12 Wellington Place, Hastings, portrayed above, is self-explanatory. It only needs adding that the figure and moon are cut by fretwork out of wood, painted white, and suspended inside the window. The tube in the clown's hand has apparently exuding from it a flat pink ribbon of tooth-paste, and the words "Follow the Shurzine line of health" are stuck on the middle, while at the end is the statement, "Each 1s. tube contains 360 inches." The window-display follows the registered design of a "comet's message" handbill, which states that, unlike the comet, "Shurzine" antiseptic tooth-paste has come to stay.

ASSOCIATION AFFAIRS.

North Kent Pharmacists' Association.—The Hon. Secretary (Mr. J. E. French) states in his annual report that the Association has to congratulate itself on a larger average attendance at the meetings. The financial statement also shows an improved state of affairs.

West Ham Association of Pharmacists.—Members and friends had a ramble to South Weald on Thursday, September 12, under the guidance of Mr. Soper. They trained to Brentwood, then walked, *via* Gallows Green and Pilgrim's Hatch, to South Weald Park, and so to tea at the Towers Hotel, South Weald. Mr. E. V. Rippin photographed the party (15) in the park.

Salford Pharmacists' Association.—The opening meeting of the session was held on September 12, Mr. D. A. Cargill (Vice-President) in the chair. Messrs. Blore, Davison, Fletcher, Gardner, Hamilton, Jones, Simmons, and Thompson were also present. Mr. F. Le C. Chandler was elected a member. Messrs. Lewis and Davison were nominated as Divisional Secretaries to the Pharmaceutical Society. A committee was appointed to carry out the arrangements for the annual dinner of November 13.

Bolton Pharmacists' Association.—The annual meeting was held in Hampson's Café on Thursday evening, September 12, Councillor Percy Knott (Vice-President) in the chair. Messrs. Massey, Fox, Rothwell, Brown, W. R. Blain (Secretary), Herbert Knott, Brindle, Rushton, Charlton, and M. Howarth (Treasurer) were also present. The reports of the Secretary and Treasurer were read, and being most satisfactory were passed. The following were elected office-bearers for the ensuing year: Mr. W. R. Blain, *President*; Mr. Herbert Knott, *Secretary*; and Mr. M. Howarth, *Treasurer*. Several gentlemen were proposed as members. The annual dinner is to be given on October 9. The members spent the rest of the evening in discussing such subjects as chemists' wine-licences and pharmaceutical titles.

Eastbourne Pharmacists' Association.—Mr. James Forbes presided at a meeting on Tuesday, September 10. Messrs. H. C. Browne, G. A. Harmer, Branson, W. F. Mosely, Procter, F. Temple, and D. Marchant (Hon. Secretary) were also present. Mr. Harmer told his fellow-members what the Pharmaceutical Standing Committee on Insurance is doing, especially in regard to the dispensing tariff. The local tuberculosis dispensary was discussed, and it was considered advisable that a qualified pharmacist should be appointed. The members also considered the question of *District Insurance Committees*,* and a scheme was arranged for prompt action for getting pharmacy represented on these should necessity occur. Mr. J. Senior was nominated for election as Divisional Secretary to the Pharmaceutical Society.

Mid-Lanark Pharmacists' Association.—As mentioned in the *C. & D.* last week, a meeting of chemists was held at the lesser Town Hall, Hamilton, on Wednesday, September 11. Messrs. Culbert and Scobie (Airdrie), Lawson (Bellshill), Hendry (Blantyre), Drynan and Hinksman (Carluke), Evans, Johnstone, and Kennedy (Coatbridge), Cross, Lohar, Nicol, and Reekie (Hamilton), Bruce (Larkhall), Allan, Ferguson, Henry, Morrison, Thomas Scott, James Simpson, and Thomas Simpson (Motherwell), Flett, Ross, and Wilson (Uddingston), Anderson, McFarlane, McMin, and Rennie (Wishaw) were present. Mr. James Lohar was asked to preside, and briefly addressed the meeting, after which the following appointments were made: *President*, Mr. Thomas Scott; *Vice-President*, Mr. John Hinksman; and *Secretary and Treasurer*, Mr. Balfour Reekie (Hamilton); with a committee of seven—one member from each district. Mr. J. Rutherford Hill, Mr. J. P. Gilmour, and Mr. Thos. Guttrie had all expressed their intention to be present, but could not be owing to a meeting of the Pharmaceutical Standing Committee on Insurance having been called for the same date. Mr. J. H. Hart (President of the Glasgow Chemists' Association) and Mr. James Lennox (ex-President) addressed the meeting, and were cordially thanked.

* Under Section 59 of the Act District Insurance Committees are appointed for the county and for each borough within the county having a population of not less than 10,000, and for each urban district within the county with a population of not less than 20,000.—*EDITOR, C. & D.*

KEEP IN MIND these aphorisms: Be orderly and neat in manipulation; cleanliness stands at the head of the chemist's scale of virtues; always wash your test-tubes twice; do not begin work in a hurry—learn to be economical of time; whatever is worth doing is worth recording.



Postal Address:
C. & D. INFORMATION DEPARTMENT, 42 Cannon Street, London, E.C.
Telegraphic Address: "CHEMICUS LONDON."
Telephone No.: BANK 852 (two lines).

INFORMATION WANTED.

We would be obliged if any reader would inform us by post-card or telephone who are the makers or agents of the articles mentioned in the following inquiries:

- 45/45. Cystoform: supply.
- 50/43. Dr. Dale's "Dentos."
- 48/5. Senecin (Keith's): supply.
- 45/41. "Xanthoform": makers.
- 52/19. "Vitaphos": proprietors.
- 52/4. Mustang liniment: makers.
- 52/5. "Aperitif Elixir": suppliers.
- 53/51. "Adonal": makers or agents.
- 52/190. "Vertex" (rat virus): suppliers.
- 50/28. "Hercules Oil Engine": makers.
- 53/49. "Cuprioa," a proprietary medicine.
- 53/50. "Jack Horner" pacifiers: supply.
- 44/64. Payne's Reagent: makers or suppliers.
- 50/27. "Ernst" belt or truss: London agents.
- 48/7. "Antiseptio Spirit" (for burning): supply.
- 53/10. "Poudre de Len," a veterinary preparation.
- 49/22. "Holland Water" put up in 1-gal. stone jars.
- 51/61. "Nogaline": what is it and who are makers?
- 52/18. "Jersey Castle" eau de Cologne (Larine et Cie.).
- 43/74. "Olivets," formerly made by Perla & Co.: suppliers.
- 41/15. Address of Chase's Remedy Co., late of Cockspur Street, W.
- 49/33. Safety glass ink-pots (to retail at one penny, filled): actual makers.
- 45/710. Medicine-dropper, in box marked "Erin" (with harp) and "B.C.C., Paris."
- 47/73. "Hilton's Grit" for mixing with putty powder and shellac, for mending hardware.

INFORMATION SUPPLIED.

During the past week we have answered inquiries as to the makers or sellers of the following articles. The information will be repeated to other inquirers who send to this Department a stamped and addressed envelope for the purpose.

- | | |
|--|---|
| Antimeristem, 37/19 | Glutannin, 35/23 |
| Aspergol, 48/4 | Goudron de Guyet, 52/6 |
| Barry's pearl cream, 45/16 | Grinding-mills (for flower-heads), 48/6 |
| Batavia powder, 50/2 | Harrison's grit (for foundries), 47/73 |
| Bone meal (for poultry-feeding), 48/62 | "Kadi" (Dastoor Specific, etc.), 44/46 |
| Bottles for penny inks, 45/7 | Kelly's syringes, 50/44 |
| British Druggists, Ltd., 50/21 | Kemp's drain-tester, 45/71 |
| British Pharmaceutical Co.'s goods, 50/49 | Kendall's spavin-cure, 47/2 |
| Butterworth's patent soother, 50/57 | Kresol, 47/1 |
| Capsicol, 43/53 | "Lo Negri" tooth-picks, 50/58 |
| Carbana products (London agents), 50/43 | "Luval" medical soap, 42/52 |
| Carvino wine, 45/46 | Melanyl, 43/73 |
| Chemical mixers, 50/45 | Mixers (band-power) for stiff pastes, 43/37 |
| Chloride of lime (in penny bottles), 48/3 | Mohair-covered douche tubing, 49/35 |
| Clockwork models for window display, 51/23 | Muthu inhaler, 41/14 |
| Dental local anaesthetics (Jamaica inquiry), 50/12 | Ovaltine, 51/57 |
| Dermol, 51/57 | Peralia perfumery, 50/47 |
| Ectodyne, 50/56 | Poumofo, 46/42 |
| Electric insoles, 44/3 | Prophylase, 43/72 |
| Fish glue (in bulk), 51/8 | Proxine, 50/48 |
| Gargol, 45/59 | "Pull-up" wrist-strap, 47/45 |
| Giraud's toilet specialities, 51/570 | Rare herbs, roots, books, etc. (book publishers), 49/44 |
| "Glass-blowing" (book), publishers, 50/42 | Ratox, 50/41 |
| Glucose chips (1-cwt. lots), 45/26 | Ross's (Dr.) life-pills (Dutch inquiry), 45/43 |
| | Spasmosan, 49/47 |
| | Sulfogenol, 46/46 |

OBSERVATIONS & REFLECTIONS.

By Xrayser II.

"Such As"

undoubtedly is a very elastic phrase, and might be construed as including anything resembling, however remotely, that to which it refers, but I have within the last few days discovered that it is sometimes used in a much stricter, and indeed in an incorrect sense. The trustees of a well-known library in which I have recently become a reader require that before books are issued a guarantee shall be obtained from a person in "a responsible position that can easily be verified, such as a Minister of any Denomination, a beneficed Clergyman, a Professor in a College," etc., and refuse to accept one from anybody, however well known and accessible, who does not occupy one of the positions actually specified. If the new provision of the Leeward Islands Act is interpreted in this fashion the list of medicines which an unlicensed person may supply will be a short one. I may add that the chief librarian of the institution referred to, while admitting the absurdity of the rule, defended the interpretation of the phrase, and said it gave the trustees no option.

The British Medical Association

has certainly driven its members into an unreasonable and almost suicidal position, and many of them are awaking to the fact. How they are to get out of it does not yet appear; the majority think their hands tied by the pledges they have given, and only one here and there has as yet had the courage to withdraw from the engagements he has been "rushed" into making. Withdrawal from the Association itself seems the only way open to the more scrupulous men, and this is a step requiring as much courage as the withdrawal from pledges, though it is courage of a different kind. It is a nice point how far a man is justified in breaking his word in a case of this kind. Only the most extreme of moralists would, I suppose, hold that nothing can possibly justify him, and if any considerable number of practitioners are really in favour of working the Act (which I believe to be the case) it is quite arguable that to do so in spite of pledges to the contrary would show a truer fidelity to the interests of the Association than blindly to follow its dictation. It exists ostensibly for the sake of the profession with whose welfare its own is bound up, and its members would be benefiting both by saving it from its leaders' mistakes.

Tuberculosis Dispensaries,

according to the Leeds medical officer of health, will not be likely to involve much expenditure in the way of drugs. So far as I can gather, the main work of the "dispenser" consists in making dilutions of various strengths of one or other of the kinds of tuberculin on the market, and this is work that is supposed to belong to the bacteriologist. For my part there is not the least reason why this class of medication should not be entirely in our hands. There is nothing mysterious in the calculations required to provide a fraction of a milligram of material that must be bought from a manufacturer in any event, and our training surely fits us for work of this character. Hospital pharmacists have done it for years. The Pharmaceutical Standing Committee will, I hope, insist on this work being placed in qualified hands, for if it is left to the medical man in charge it will almost certainly fall to be done by some

underling the accuracy of whose work it would be quite impossible to check.

The Pharmaceutical Section

of the International Congress of Applied Chemistry is on this occasion of special interest to pharmacists in this country, and you are to be congratulated on the steps you have taken to keep us fully informed as to the proceedings. But for your public-spirited action we should, I take it, have remained in ignorance of the mass of valuable material submitted to the section. Of particular importance are the report on toxic drugs and the investigations on belladonna. The value of fertilisers as shown by Messrs. Ransom and Henderson, and the equally useful paper by Mr. Carr, consists not so much in the increased yield of alkaloid by the leaves as in the enormous increase of green plant per acre, and, as pointed out by Messrs. MacEwan and Forrester, this means a large increase of the yield of atropine per acre, and no doubt a corresponding reduction in the cost of the drug. Messrs. Ransom and Henderson's conclusion that it is useless to expect uniformity in medicinal potency, even when the drug is carefully collected and dried, is itself a sufficient justification for the continuance of the work of the Committee on Standardisation. Improvements in drug-culture is a matter of public concern, and if our Board of Agriculture can be induced to take the question up, as it is being taken up in America, we might look forward to some developments, ere long, of scientific and trade value.

The Use of Alabaster in Medicine

is being discussed in "Notes and Queries," but it does not seem to have occurred to any contributor to the discussion that the alabaster of the ancients was a carbonate, not a sulphate of lime. It was the former kind that was sent by Helias, Patriarch of Jerusalem, to our King Alfred (as told by Mr. Henry S. Wellcome in his "Anglo-Saxon Leechcraft"), and which appears in the "Medicinal Anglicum" as a remedy "for all strange griefs." This *lapis Alabastrites* took its name, says Pliny, from the city of Alabastrum in Egypt, and it was from it that the ointment jars known as Alabastra were first made. Whether the mention of one of these in the Gospel of St. John had anything to do with the use of the stone as a medicine I cannot say, but it appears from several of the notes in "N. & Q." that country people have long been, and were until quite recently, in the habit of surreptitiously chipping pieces off the alabaster monuments in our cathedrals for use in plasters for various complaints, the efficacy of the application being attributed to its sacred source. Alabaster is included in some of our old English Dispensatories, though it was never official with us, and Lemery devotes a chapter to it. He says it resolves and softens roughnesses, eases pains in the stomach when externally applied, and makes a useful absorbent and strengthening powder for the teeth and gums.

THE CHEMIST may sometimes do more than one thing at a time by allowing things to do themselves.

"THE CHEMISTS' DICTIONARY OF SYNONYMS AND TRADE NAMES" is the title of a little volume recently published at the offices of THE CHEMIST AND DRUGGIST (2s. 6d. net). It contains a vast amount of information in small compass, and a special feature of the work is the large number of fancy names or trade-names included. Many recent remedies as well as old-fashioned synonyms are given, and the book should prove a useful companion to the pharmacist in his daily work.—*The Prescriber*.

OUR Window Display Terms

have now been modified.

DETAILS ON APPLICATION.

THE "SANITAS" CO. LTD.,
LIMEHOUSE, LONDON, E.
Disinfectant Manufacturers.

SEED DRESSING SEASON.

Our new Scarecrow Liquid Seed Dressing and well-known Carbolyzed Wheat Dressing and Ground Vitriol are of guaranteed strength, securely and attractively packed. Sulphate of Copper, Ground Copperas and all dressing materials at lowest prices. We pack in agent's own name and supply advertising matter.

TOMLINSON & HAYWARD, LTD., Lincoln.

REYNOLDS & BRANSON, LTD.,

Grand Prix **LEEDS.** Turin 1911.

PHARMACEUTICAL PREPARATIONS.

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B.P.C. (1911), Galenicals, &c.

SURGICAL INSTRUMENTS.

X-Ray Apparatus and Medical Batteries, Dressings, &c.

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Sparkling Phosphorated, Puritzer, Dry Ginger Ale, &c.

SCIENTIFIC APPARATUS

(Chemical, Physical and Photo graphic). Balances and Weights.

CHEMICALS FOR TECHNICAL AND ANALYTICAL PURPOSES.

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Editorial Articles.

State Medical Service.

Of all the medical journals "The Lancet" is the sanest in regard to the medical service under the National Insurance Act. Referring last week to the approaching publication of the medical regulations under the Act, our contemporary remarks:

Peace or war will be decided by the impression created by the Regulations, especially as to how far they meet the just resolution of the medical profession to obtain adequate remuneration. It may be entirely necessary for the medical profession to withdraw from co-operation in the working of the Act, while offering to the public an alternative scheme of a public medical service. But it is essential before taking this extreme step to count the cost very carefully, to estimate the advantages as well as the disadvantages which may present themselves under the Regulations, and to look closely into the differences which exist between the minimum demands and the provisions of the Insurance Commissioners. We cannot feel hopeful that the decision will be for peace, and if justice demands war we must not think of expediency; but most urgently we put forward the claims of deliberation, full calm, and as provident as may be.

Even reading between the lines there is nothing very frightful in this statement, except that it is a quiet dig at the "British Medical Journal," which is usually far from sane when it deals with this question; and it would be decidedly to the advantage of the British Medical Association and of medical men if such remarks as those in the "B.M.J." last week, entitled "Doctors' Boycott and Politicians' Bluff," were left unsaid. Perhaps that is what "The Lancet" means but does not say. In anticipation of the worst, the State Sickness Insurance Committee of the Association has published two revised schemes for public medical service—viz.:

(A) Provision of medical attendance and treatment for persons insured under the National Insurance Act, and persons not so insured.

(B) Provision of medical attendance and treatment for insured persons.

The schemes submitted are models to be considered by the divisions of the Association. They set forth the object and constitution, the manner of government, and other rules and regulations whereby medical practitioners may be upon the lists of the local branches of the Association to attend patients who subscribe to the scheme. Among the powers of the local committees are the appointment of dispensers and the making of arrangements with chemists; but this does not mean that the doctors are not to dispense medicine, for the privileges of subscribers include, if other arrangements are not made, "all needful medicines and first dressings for wounds and other injuries," and, on payment as extras, cod-liver oil, linseed-meal, leeches, serums, vaccines, oxygen, bottles, jars, dressings or bandages. Scheme A is based upon a capitation system of payment. The idea in this and Scheme B is for the subscribers to pay into the Public Medical Service, weekly or otherwise, a sum in addition to what they have paid under the National Insurance Act. It may be for the insured person alone, or for his wife and family also. The payments are based upon (1) the income of the person (20s.,

30s., or 40s. per week), and (2) whether 8s. 6d. or 6s. is the *per capita* payment for medical benefit under the Act. The additional payments per week would be from $\frac{1}{2}d.$ to $2\frac{1}{2}d.$ For a man, his wife and family the following is one of the scales :

Description of Subscriber	Class A. Income 20s. per week and under	Class B. Income over 20s. and under 30s. per week	Class C. Income over 30s. and under 40s. per week
Insured person ...	2d. per week = 8/8 per annum	3d. per week = 13/- per annum	4d. per week = 17/4 per annum
Wife, if not herself an insured person	1½d. per week = 8/6 per annum	2d. per week = 8/8 per annum	3d. per week = 13/- per annum
A single child (under 16 years)	1½d. per week = 8/6 per annum	2d. per week = 8/8 per annum	2d. per week = 8/8 per annum
2 children under 16 years	2d. per week = 8/8 per annum	3d. per week = 13/- per annum	3d. per week = 13/- per annum
3 or more children (under 16 years)	3d. per week = 8/8 per annum	4d. per week = 17/4 per annum	4d. per week = 17/4 per annum
Total for husband, wife and unlimited number of children under 16	6½d. per week = 28/2 per annum	9d. per week = 39/- per annum	11d. per week = 47/8 per annum

These payments to cover the following : Ordinary medical and surgical treatment within specified hours, and all needful medicines and first dressings for wounds and other injuries, except in cases where the service does not undertake to provide these. The subscribers would not be entitled to free attendance for certain services, such as confinements, miscarriages, vaccinations, dislocations, and operative dentistry, for each of which a fee is stipulated. Scheme B is on the same lines and differs only in regard to the financial arrangements for payment of the medical practitioners, payment by subscribers or patients being on the same basis. It will be noted that the scheme amounts to putting the medical-benefit provisions of the National Insurance Act into force *plus* a provision of payment that will satisfy the British Medical Association; in other words, that the Association swallows the principle of State Medical Service, and weekly payments for that service by the people whether they are well or ill. The main point so far as chemists are concerned is that the scheme embodies the supply of medicine, but it is not essential to the working, and it would not take away a penny piece which English chemists earn by dispensing. It is now being freely stated in retail circles that the dispensing tariff proposed on behalf of chemists includes a dispensing fee of 4d. per prescription, exclusive of the cost of ingredients as specified in a price-list compiled from official and unofficial sources; but all that can be said with certainty, at present, is that the broad principles advocated by the pharmaceutical representatives have been recognised. The work of the Advisory Committee is not completed at the time of our writing, and it is unwise to be sure about details.

Science in Dispensing.

THE art of dispensing is perhaps one of the most fascinating occupations to men of reflective mind, and especially to those who keep pace with progress in the sciences relating to compounding of chemicals and drugs into medicines, and no department of the art is so full of undreamt-of possibilities as that in which alkaloids are combined with other materials. If pace is not kept with the progress in this department, dispensing difficulties arise which appear to be insoluble. In connection with this we have read an interesting communication by M. Scholtz, from the Chemical Institute of Greifswald University, to the "Archiv der Pharmazie," on the solubility of alkaloids in basic solvents, wherein some new facts are set

forth. All who are familiar with the assay of opium know that the isolation of morphine depends upon the solubility of all the other opium alkaloids except morphine in the ammoniacal solution. Scholtz's experiments started from similar solubility of chondrodine in aniline, and this induced him to look into the solubility of alkaloids in ammonia solutions. He found the solubility of strychnine in pure water at 20° C. to be 1 part in approximately 7,000 parts; in 10-per-cent. solution of ammonia the solubility was approximately 1 in 3,000 at the same temperature. Hesse gives the solubility of cinchonine in cold water as 1 in 3,670, but Scholtz finds it to be 1 in 7,600 at 20° C.; while in 10-per-cent. ammonia it is 1 in 4,000. A curious point in regard to solubility in alkaline solvents is that with alcohol the solubility is less in ammoniated alcohol than in pure spirit. In the case of strychnine the alkaloid dissolves in 120 times its weight (1 in 120) of alcohol, sp. gr. 0.832, at 20°, and only 1 in 390 of the same alcohol containing 10 per cent. of ammonia; while in the case of cinchonine 1 part dissolved in 116 parts of alcohol, sp. gr. 0.852, and 1 in 240 of the same alcohol ammoniated. M. Scholtz completes his observations with the following table, which shows the weights of the alkaloids named in the left-hand side dissolved by 100 parts by weight of the liquids—aniline, pyridine, piperidine, and diethylamine—at 20° C. :

	Aniline	Pyridine	Piperidine	Diethylamine
Atropine ...	34	73	114	67
Brucine ...	12	28	1	1.6
Cinchonine ...	1.6	1.4	3.5	1.3
Cocaine ...	76	80	56	36
Morphine ...	6.5	19	66	8
Narcotine ...	25	2.3	1.7	0.4
Papaverine ...	29	8	1	0.4
Quinine ...	14.5	101	119	57
Strychnine ...	20	1.5	0.7	1.7
Thebaine ...	30	9	2	0.7
Veratrine ...	37	175	83	271

The author suggests that atropine and cocaine have the characteristics of esters when heated with alkali, and it may be that in other instances there are similar reasons for solution. Another chemical observation which dispensers should make a note of is that of Biddle (*see* "Scientific Progress") on solutions of quinine and cinchonine salts. When aqueous solutions of these are heated to boiling-point (93° to 102° C.) the alkaloids are converted into toxic isomers, and long exposure to sunlight does the same. We should like to see these observations confirmed: it is remarkable that quinologists have not hitherto pointed out this characteristic of the alkaloids. In the meantime the statements are worth bearing in mind.

Government Chemist's Report.

THE report by Dr. James J. Dobbie in his capacity as Government Chemist on the work of the Laboratory for the year which ended March 31, 1912, has been published this week. The period covered is the first complete year since the Laboratory was separated from the Department of Customs and Excise, so Dr. Dobbie begins with an historical account, in which he says: "The Laboratory dates back to 1843, when a laboratory was established at Somerset House in connection with the Inland Revenue Department, mainly for the purpose of checking the adulteration of tobacco." This is scarcely correct. Previous to 1858 the chemical work of the Board of Inland Revenue was carried on in Old Broad Street. Mr. George Phillips, to whose researches are due both the idea of methylated spirit and the process which rendered it practicable to permit the use of alcohol duty-free in the arts and

industrial occupations, was the superintendent. We have frequently heard the older generation of Government Chemists speak of the Broad Street Laboratory, and have known those who worked in it. At the present time the permanent scientific staff of the Laboratory, by which term is meant the house in Clement's Inn and the branch laboratory at the Custom House, consists of the Government Chemist and his deputy, four superintending analysts, and twenty-one analysts divided into first and second class, all these being pensionable officers. Besides there are between seventy and eighty temporary assistants appointed by the Government Chemist, or Revenue assistants lent by the Customs and Excise, the latter being engaged exclusively on chemical work connected with Revenue service. During the year 1911-12 195,170 analyses and examinations were made as compared with 186,044 in the previous year, but the samples examined in the provincial stations brought the total number of analyses and examinations up to 345,181. The work of the Laboratory is done in eighteen sections, fifteen of which represent Government Departments, and of these the Customs and Excise is most important to the chemical and drug trades. In the course of his remarks on spirits Dr. Dobbie makes the following observations :

Spirituous Preparations.—A large number of imported articles, such as medicinal and toilet preparations, flavouring essences, essential oils, perfumery, soaps, inks, painters' colours, varnishes, and blacking, are examined for the purpose of determining the proportion of spirit present and of ascertaining whether they contain other dutiable ingredients, such as ether, sugar, or saccharin. The number of such samples dealt with last year was 10,003. The number of samples taken from export consignments of medicinal tinctures, liniments, extracts, infusions, medicinal spirits, hair-washes, dentifrices, etc., presented for drawback on exportation last year was 22,259. The strength of the spirit was found to have been erroneously stated in 242 cases.

Methylated Spirit.—Nine hundred and six samples of wood naphtha and 214 samples of mineral naphtha were examined as to their suitability as denaturants of alcohol, and all were approved. With two exceptions, ninety-three samples of petroleum ether submitted for approval for mixing with the industrial methylated spirit allowed to be used in the manufacture of felt hats were passed as suitable. Tinctures, essences, perfumed spirits, etc., are required to be made with duty-paid alcohol. To check the illegal use of methylated spirit in these preparations, 1,622 samples were examined, but in no case was the presence of methylated spirit detected.

Under "Wines" reference is made to the new statutory provisions respecting the mixing of foreign with British wines, this having increased the number of samples of British wines submitted to the laboratory, and it is stated that "foreign or British wines so medicated or mixed with drugs as to entitle them to be classed as medicines rather than beverages may be sold by registered chemists and druggists without a licence. In order to ascertain whether they were entitled to this exemption forty British and nine foreign wines were examined during the year." Reporting on the work with tobacco, it is stated that

The number of miscellaneous samples received during the year was 2,735, including, *inter alia*, nicotine sheep-dips and fumigating-powders. The number of nicotine samples examined was 1,569. These were examined to ascertain whether they were sufficiently free from other constituents of tobacco to allow of their being imported or delivered free from bonded warehouse. Tobacco offal used in the manufacture of insecticides and sheep-dips must be denatured according to approved formulæ, and the efficacy of the treatment for this purpose tested by the examination of samples submitted to the Laboratory. The articles examined under this head included "joggery"—a mixture of tobacco and opium with sugar and molasses—used by Asiatics.

It is seldom that the Government Chemist has anything to say in regard to medicine-stamp duty, but on the present occasion he makes the following interesting statement :

Seventy-eight samples of medicines, or articles offered for sale as medicines, were examined during the year in connection with the Medicine-stamp Acts. These Acts impose duties, payable by means of special stamps, upon preparations advertised for the cure or relief of human ailments. There are, however, certain exemptions, and it is chiefly in connection with these exemptions that analyses of the samples are required. Thus a single medicinal drug, sold unmixed with any other substance, is not charged with stamp-duty, and many of the samples received were analysed in order to ascertain whether they were, in fact, simple drugs or mixtures. Another provision of the Acts exempts, in certain circumstances, medicines of which the composition is known, and analyses are required to establish the identity of samples which it is claimed come within this exemption. Among points of interest arising may be mentioned an instance of pills which were advertised as a remedy for obesity. The magistrate before whom legal proceedings were brought held that obesity was an "ailment" within the meaning of the Acts, and the seller was convicted of an offence. Specimens of water, and of mud compresses, alleged to have radio-active properties and to exert medicinal effects, were among the samples examined, which included also pills, powders, plasters, ointments, medicinal snuff, herbs, corn-cures, embrocations, and various liquid and solid "remedies."

The report so far as Customs and Excise are concerned is shorn this year of many of the statistics regarding methylation of spirit, probably because these are given fully in the Excise Commissioners' report, and hitherto we have noted that the figures of the two Departments were not quite comparable. The work that the laboratories do for the Board of Agriculture is somewhat extensive and embodies the following :

Sheep-dips.—One hundred and forty samples of sheep-dips were received for examination in connection with applications by manufacturers for the inclusion of their preparations in the official "Schedule of efficient dips." Before the Board of Agriculture give their approval to any dip, they must be satisfied that the formula provides for a sufficient quantity of the active ingredients, and that the dip has been made in accordance with the formula. Fifty-seven samples were found to agree with the formulæ, and were of effective strength at the proposed dilution; twenty were deficient in active ingredients at the dilution submitted by the makers; and in sixty-three other cases the formula required modification to ensure an efficient dip. Thirty-five samples of approved dips, purchased in different parts of the country, were also examined with the object of ascertaining whether the dips as sold corresponded in composition with the samples which had received the Board's approval. The analysis showed that six of these had not been prepared according to the formula previously submitted and approved.

Reference is also made to the occurrence of hydrocyanic acid in linseed cake, a subject which is being much discussed by agricultural chemists at present. The Laboratories examined seventeen samples of drugs and pharmaceutical preparations for the Crown Agents for the Colonies, and two samples of glycerin and two of bismuth preparations were not in accordance with the British Pharmacopœia requirements, as they contained small quantities of arsenic as an impurity; but Dr. Dobbie remarks that

Since the issue of the final report of the Royal Commission on Arsenical Poisoning in 1903, a British Pharmacopœia Committee has revised the methods prescribed in the last issue of the Pharmacopœia for testing drugs for the presence of arsenic, and has somewhat increased the stringency of the requirements. In the cases to which reference has been made the proportions of arsenic present were only slightly in excess of the very small minimum recognised as permissible, but, nevertheless, the excesses were sufficient to show that the high standard of purity in respect of arsenic now required is not always kept in view by manufacturers.

Similar work in regard to drugs, surgical preparations, and anaesthetics is done for the War Office and the India Office, which submitted 140 samples for examination. There was a complaint about a sample of chloroform producing irritation and causing vomiting, but no impurity could be found in it, and out of a considerable number

of other samples examined one did not conform to the B.P. in so far as it contained a trace of fatty matter. It is also observed that

Several samples of *Ether purificatus* were found to contain small quantities of aldehyde, and among the samples of *Ether aceticus* examined there were several which did not agree in composition either with chemically pure ethyl acetate or with the acetic ether of the Pharmacopœia.

The samples of antiseptic dressings examined showed an appreciably lower proportion of the antiseptic than was required to be present, more especially in the case of mercury preparations. Thus in dressings required to contain 1 per cent. of the double chloride of mercury and ammonia known as sal alembroth less than .2 per cent. was found in one case and as little as .3, .4, and .6 per cent. respectively in three other instances. Of the double cyanide of mercury and zinc, where 3 per cent. was required, only .4 was present in one case and less than 2 per cent. in two others. In one case where 10 per cent. of iodoform was required, only 8 per cent. was found. Boric preparations were more satisfactory. With regard to other preparations, the most serious departure from standard that was observed was in a solid extract of *nux vomica*. The British Pharmacopœia requires this preparation to contain 5 per cent. of strychnine, but the sample in question contained only 2.9 per cent. of the alkaloid.

The Government Chemist might show a good example to others by expressing decimal fractions properly—the omission of the prefatory cypher often leads to misunderstanding. As referee under the Sale of Food and Drugs Act Dr. Dobbie had ninety-three samples submitted to him by magistrates during the year, and in seventy-six instances he agreed with the public analyst, disagreed in fourteen cases, and issued no certificate in three cases. Cream of tartar was the only sample specially interesting to chemists and druggists, and in this instance Dr. Dobbie disagreed with the public analyst because he found the sample to conform substantially to the requirements of the British Pharmacopœia for cream of tartar.

Too Previous.

We cut the following paragraph from an Australian contemporary :

"The Poisons Schedule in Great Britain now contains sulphonal and its derivatives and the poisonous derivatives of mercuriol (*sic*), also diethyl-barbituric acid and other derivatives of barbituric acid and all poisonous amides and their derivatives. This brings into the list all poisonous hypnotics. It is more than probable that Australian pharmacy boards will follow the example of Great Britain and add these substances to their schedules."

This is wrong so far as it refers to the resolution of the Pharmaceutical Council in March last. That resolution is still under the consideration of the Privy Council. Sulphonal is included in the 1908 Act Schedule.

Will They Fight?

The United Kingdom is a big attraction for American manufacturers of proprietary medicines. The latest to come to us are those who offer their goods upon some plan in which co-operation or profit-sharing is held out as the feature. "Rexall" came to us about a year ago, and the fact was not ignored by their competitors in the United States, who were not slow to realise that if there is anything here for "Rexall" there might also be for them. So now we have "Nyal" proprietaries offered to the trade. "Nyal" (New York and London) have made a beginning in Ireland, where they are not bothered with medicine-stamp duty nor with National Insurance Act medical benefit. So far British manufacturers and wholesalers have not worried themselves about these co-operative or profit-sharing ventures; but it is just as well that we should note that another bird from the eagle's brood has come to our shores. In the past some of these high fliers have come to stay.

Dental Reform.

The resolutions come to at the recent annual meeting of the British Dental Association with respect to amendment of the Dentists Act were as follows :

(1) "That an amendment of the Act should be sought providing prohibition of practice by unregistered persons, and such a drastic alteration to Section 3 as shall prevent an unregistered person from using any title or description whatever as applied either to persons or premises which shall lead any person to believe that such unregistered person or his servants hold himself or themselves out as willing to practise dentistry."

(2) "That the word 'person' in the 1878 Act and in this Act shall include a body of persons corporate or unincorporate."

(3) "That provision be made for the consideration of existing unregistered practitioners."

(4) "That the enforcing of the provisions of the Dentists Act should be vested in the Government."

(5) "That provision be made for direct representation of registered dentists on the General Medical Council."

One or two of these amendments are quite commendable—for instance, 2 and 4—but the terms of 1 and 3 will have to be amplified somewhat before approval of them can be expressed. The trouble with registered dentists is that the unregistered persons who compete with them compete on the price basis. Since the enforcement of the Dentists Act the practice of dentistry by those registered under it, especially by Licentiates of the Colleges, has steadily been growing away from the greater part of the public, because fees have increased; indeed, many dentists have increased their fees deliberately in order to keep their practices select, their charges in most cases ranking by guineas. Working people and others with small incomes have in consequence had to seek elsewhere for dental service, and it is supplied by persons whose names are not on the Dentists' Register. There are more of these in practice than of registered men, and the proposal to register them now will not relieve the situation so far as the public is concerned. The first thing that it would do would be to stop advertising, which is essential to working-class practice.

Borneol in Japan.

From ancient times Barus or Borneo camphor has been used in China in connection with the ceremonials attendant upon the burial of the dead. To a limited extent the same is true of Japan. Borneo camphor is obtained in a crystalline condition in fissures of the gigantic tree *Dryobalanops aromatica*, which is hewn to pieces for the purpose. The tree grows in the Malayan Archipelago and in the Peninsula as far north as Siam. The finest Borneo camphor was formerly worth its weight in gold and was highly esteemed by the Chinese. Ngai camphor, from *Blumea balsamifera*, has been used as a substitute for the Borneo camphor, which it resembles in every respect except its optical properties. The observations of Plowman on the latter and of MacEwan on the former may not have been forgotten. The occasion for the present remarks is a communication that we have received from our Yokohama correspondent, which reveals the fact that synthetic borneol is now largely used in Japan in place of the natural camphors; but we now learn that besides "Taisei Riuno" (*i.e.*, the genuine natural Borneo camphor) imported from China, borneol has been largely imported from France and Germany. This artificial product did not make much headway until Suzuki, of Kobe, undertook the manufacture of borneol, and this native industry has developed greatly since its establishment in 1909. It appears that there is some local complication arising from the tariff charges. "Taisei Riuno" has been paying 6 to 7 yen (2s. 0½d.) per kin (=1½ lb.),

but German and French borneol has paid 10 per cent. *ad valorem* as a spice, which is equivalent to about 3 yen per kin. We gather from our correspondent's letter that the recent revision of the tariff has increased the duty on the imported borneol, and in consequence Suzuki is now making arrangements for the sale of his product through more numerous channels than hitherto. We observe that the official returns of imports into Japan contains the following entry: "Camphor, Borneo, blumea or ngai and artificial Borneo camphor." The imports fluctuate. In 1911 they were 45,199 kin, against 35,798 in 1910 and 14,234 kin in 1909; but during the six months ending June 1912 the imports were only 7,947 kin, against 33,519 kin in the corresponding period of 1911. Apparently this refers to synthetic borneol, which is imported from Europe, while the "borneol" from China is natural Borneo camphor.

The Camphors. An Historical Note.

By C. C. Bell.

THE History of Camphor as it is told by Flückiger in "Pharmacographia" leaves us ignorant as to when and how the Chinese learned to extract the "gum" from *Laurus Camphora*. We are told that Barus or Borneo camphor was the first that came into use among the Arabs, by whom doubtless it was introduced into Europe, and that it was considered the best down to and in the Middle Ages. "The Middle Ages" is rather a widely inclusive term, but it is not wide enough to cover the facts, for Borneo camphor had even in Europe the reputation of being the best well into the eighteenth century; not only so, but European pharmacists evidently thought (whatever the fact may have been) that part at least of their supply came from Borneo or (which is the same thing) Sumatra. European travellers, too, until the seventeenth century was closing, speak in the same sense. Thus Pigafetti, a companion of Magellan in the first circumnavigation of the world (1519), says:

"The Country (Borneo) affords Camphire, which is the Gum of the Tree *Capar*."

The French Admiral Beaulieu, in his account of his voyage taken exactly a hundred years later, says of Sumatra:

"Both the inhabitants of the coast and the Dutch and English buy up their Camphire to carry it to Surat and the Streight of Sonda The Camphire of Bataham is reckoned the best, but there is not much of it."

Bataham was near Barus. Mandelslo, one of the Holstein ambassadors to Persia, who travelled in the Indies in 1639 and made a long report on the products of the countries he visited, also says that the "camphire" of Borneo is the best. So, too, with Mr. Ralph Smith, a London merchant expressly sent to the East in 1583:

"Camphire is very precious among the *Indies*; that which is compound comes from China, but the best from Borneo."

This is the first mention of Chinese camphor I have met with in these old Voyages, culled from Hakluyt and Purchas. In 1611 Captain Saris, who had been sent out to arrange for a trade with Japan, reports that camphor is to be had there too, but our trade with these islands ceased entirely in 1624, and only the Dutch were for centuries admitted to their ports. I may add that Boerhaave, early in the eighteenth century, says that camphor comes from Borneo and Ceylon, and is found in crystals in the tree. This is more definite than our own Coles (the first, I believe, of our herbalists to mention camphor), but he speaks to the same effect. Camphor, he tells us, was at one time thought to be a mineral, found on the shores of the Indian Ocean, but has been proved by Scaliger to be the gum of an Indian tree. This tree Coles (1657) describes, and adds that the

"Gum, which is the Camphire, issueth forth partly of its owne accord, but chiefly by incision; it cometh forth clear

and white, without any spot therein but what it acquireth from their foul hands that touch it."

Lemery (1723) is very explicit, and must, one cannot but think, have got his particulars from some Dutch trader. He says:

"Cetto resine découle du tronc & des grosses branches d'un arbre qu'on dit ressembler au noyer, & qui croît dans l'Isle de Borneo en Asie & en la Chine; on la trouve au pied de l'arbre où elle s'est figée en grains de différentes grosseurs & figures . . . ces grains tombant les uns sur les autres, s'agglutinent légèrement & font des masses plus ou moins grosses."

Nobody can fail to see that it is of the origin of Barus camphor that he speaks. But we are told by Garcia de Orta in 1563 that only Chinese camphor was exported to Europe, and Kaempfer (quoted in "Pharmacographia") tells us in 1692 that the Dutch imported Borneo camphor into Japan, but brought only Japan and China camphor home to Holland. And Lemery says that Holland was the only market for the refined camphor of the pharmacists. The inference is pretty plain; there must surely have been deception somewhere at that time; but we are still left in uncertainty as to the time when Borneo ceased to send us camphor. We know (see Brinckley's "China") that in the seventh century the Arabs were carrying camphor from Sumatra into China, Canton being the port of entry, and that in the thirteenth the Chinese were exporting it to Sarbaza (Palembang), the great centre of trade between East and West, where it was exchanged for Arabian goods. Possibly the substitution began there, but it is at least curious that the fame of the Barus article should have survived so long. It was not until the publication of the "London Pharmacopoeia" of 1747 that the origin of camphor was officially stated; the gum is there described as "*Resina arboris Camphoriferae Japonicae (Breyi)*." In the edition immediately preceding this (1721) it was noted simply as "*Caphura*," and classed among *Lachrymae*.

AT THE COUNTER.

NOVELTIES FROM NORTANTS.—Boy of Twelve: "Two pennoth of crystals, please." Chemist: "What are they for, my boy?" Boy: "To make cod-liver oil with"! Another bright youth: "Powder bellows, please, with insects in."

Two orders which a Hampshire chemist received: "Please send another bottle of medicine, the last has not been fatal." "Powder for a child, very caustic."

30

Bowl & Eel,

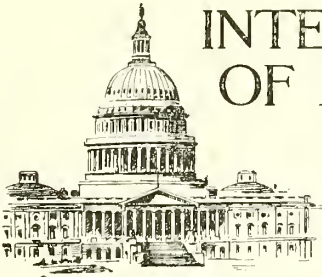
was a puzzler received by a chemist at Enfield Wash.

"PENNYWORTH of globular salts for rheumatics. Father has been 'advertised' to take it," is a specimen of unconscious humour enjoyed by the Manor Park pharmacist who received the request. Another tit-bit, of ancient standing this time, is "Pennyworth of complexion of senna."

"ANGLE STEWART POWDER" proved somewhat of a poser to a Chippenham pharmacist. In answer to further inquiries, the juvenile messenger said, "Father been having a lot of beer and keeps on being sick." A Seidlitz-powder was sent, and it did not come back; at least to the shop. Possibly a crony had told the sufferer to take "Angostura" when he could drink no more beer.

THE ASSISTANT SCORED.—A working-man had left a list of ingredients required for making up a nostrum of his own. The last read "*Salvia lati*." "Let me see," said the governor, "this man is a gardener, and he naturally knows botanical names. What variety of '*Salvia*' can he require?" Finding it had been dispensed before by junior, that worthy is called up to explain, when "Spt. ammon. aromat." is the prompt reply given.

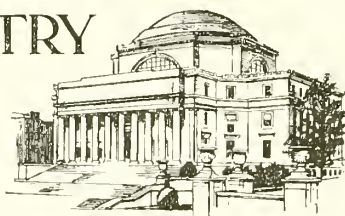
CITRIC MATERIALS.—H.M. Consul at Palermo has furnished the "Board of Trade Journal" with extracts from the annual report for the year ended November 30, 1911, of the Camera Agrumaria (E.I. Citrus Chamber). The report was fully dealt with in an editorial article in the *C. & D.* of July 13.



INTERNATIONAL CONGRESS OF APPLIED CHEMISTRY

Eighth Triennial Meeting Washington & New York

SEPTEMBER 1912



THE CAPITOL, WASHINGTON
LOW MEMORIAL LIBRARY, COLUMBIA UNIVERSITY

Reported by Our Own Representative at the Congress.

*Columbia University, New York,
September 7, 1912.*

THIS eighth meeting of the International Congress is attended by 2,500 members, out of 4,500 who have actually paid their dues as members of Congress. The work involved in arranging for meetings, not to mention the comfort of many men, has been enormous, but it has been accomplished nobly by the General Secretary, Dr. Bernhard C. Hesse, and his staff. To him I am



CONGRESS GROUP ON BOARD S.S. "ST. LOUIS,"
including, in the centre, Professor Leon and Madame Lindet, of Paris; on their left Professor G. T. Morgan, Dublin; Gabriel Lafitte, Paris (of Messrs. Bertrand Frères, Grasse); on his left is M. B. Flürscheim, an authority on explosives; others are M. Justin Dupont, Conseiller du Commerce de la France and a manufacturer of synthetic perfumes; Vladimir Yakovlev, of St. Petersburg; Professor Ferreira da Silva, of Coimbra, and Mr. W. Mair.

specially indebted for many acts of courtesy, for information promptly given, and for solution of difficulties.

The following is a list, complete as far as I can make it, of visitors from Great Britain and Ireland:

Mr. D. Bagley (London).
Mr. W. H. Bassett (Waterbury).
Mr. P. F. Berk (London).
Mr. F. G. Breyer (Palmerston).
Mr. Thomas R. Burton (London).
Mr. and Mrs. George Christison (Glasgow).
Mr. Charles G. Cresswell (London).
Mr. Alexander Findlay (Aberystwyth).
Dr. Bernhard J. Flürscheim (Fleet).
Dr. and Mrs. M. O. Forster (London).
Mr. and Mrs. Jos. F. Fuerst (London).
Mr. John Gray (London).
Mr. Robert H. Greeff (London).
Mr. Robert W. Greeff (London).
Professor and Mrs. Arthur G. Green (Leeds).
Dr. Percy C. C. Isherwood (Bushey).
Mr. and Mrs. Holman Kingdon (Warrington).
Mr. and Mrs. Hans Lebach (Uxbridge).
Dr. and Mrs. R. Lessing (London).

Mr. Bernard R. Lucas (Northwich).
Mr. George W. MacDonald (Rochester).
Mr. Wm. Mair (Edinburgh).
Mr. and Mrs. A. E. Marshall (Wallsend-on-Tyne).
Dr. R. Messel (London).
Dr. and Mrs. G. T. Moody (London).
Professor G. T. Morgan (Dublin).
Mr. A. J. and Miss Dorothy Murphy (Leeds).
Mr. and Mrs. Otto Oberlander (London).
Mr. G. P. Pallitt (Northwich).
Professor and Mrs. W. H. Perkin (Manchester).
Mr. Gaston de Pierres (London).
Dr. F. B. Power (London).
Sir William and Lady Ramsay (London).
Sir Boverton Redwood, Bart. (London).
Dr. Samuel Rideal (London).
Mr. Walter Rosenham (London).
Mr. Meyer Wilderman (London).

There is a fair representation of Canadian chemists, and from Australia are Mr. and Mrs. Russell Grimwade (Melbourne) and Mr. George Harker (Petersham, N.S.W.). As to other countries, many distinguished chemists of international reputation have attended. Among those whose names are familiar were: Professor Leon Lindet (Paris), Professor Strohmer (Vienna), Dr. K. von Buchka (Berlin), Professor Engler (Karlsruhe), Dr. Duisberg (Leverkusen), Professor Giacomo Ciamician (Bologna), Professor Ludwig Knorr (Jena), Dr. F. Raschig (Ludwigshafen), M. R. Chabrie (Paris), Mr. Samuel Eyde (Christiania), and Dr. Carl Duisberg (Elberfeld). Professor Erhlich was expected but did not come.

The acting President of the Congress is Dr. William H. Nichols, who was President of the Society of Chemical Industry in 1904-5. He is the father-in-law of Dr. M. O. Forster (London). The Hon. President is Professor Edward W. Morley, Sc.D. (Yale), an Honorary and Foreign Member of the Chemical Society of London.



DR. NICHOLS,
President of the Congress.

Inauguration at Washington.

Commensurate with the dignity and resource of the American nation and setting a fine keynote for the Congress were the ceremonies at Washington on Wednesday, September 4. Washington has a wonderful wealth of marble palaces—administrative, artistic, and memorial—and its magnificent vistas and groupings are all part of a planned scheme carried out with scrupulous regard to beauty and amenity. This is entirely in the control of

the Government, and the best architectural advice in the country is called in. It is difficult to describe the simple beauty of the new pure white marble Continental Hall in which the inaugural meeting took place. Of classic design, with Corinthian treatment, it is a palace to perpetuate the memory of the heroes of the Revolution, erected solely by women—the daughters of the American Revolution—a body of one hundred thousand earnest women. It is



PRESIDENTS FROM THREE NATIONS.

From left to right: Sir William Ramsay, K.C.B., Dr. Rudolph Messel, and Dr. W. H. Nichols, who have occupied the Presidential Chair of the Society of Chemical Industry.

“a Pantheon of Patriotism,” and has cost to date 15,000/. The auditorium, in Georgian style of decoration, was comfortably filled with a company of 1,000. As my cabled messages reported, about 500 of the members were conveyed by two special Pennsylvania Railroad all-steel trains over the 220 miles between New York and Washington; they were joined at Philadelphia, as the train passed there, by Professor Remington, Dr. George D. Rosen-garten, and others. Many more joined at Washington

from the Southern and Western States, and ten had come from Japan by the Pacific route. President Taft, to the disappointment of all, was unable to be present to preside in person as he had intended: he had sprained his ankle at golf, but had travelled specially from his summer home near Boston, Mass., arriving that morning, to keep his engagement with them. So announced the President of the Congress who stood in his stead, but Mr. Taft would receive his guests that afternoon as originally arranged. Dr. Nichols expressed the sympathy of all with the President and their highest possible esteem and appreciation.

The platform, which was beautifully festooned with flags of all the nations constituting the Congress, was filled with the official representatives of those nations, among them Sir William Ramsay and Professor W. H. Perkin, of Manchester, for Great Britain; Professor Lindet, representing the French Government; Dr. K. von Buchka, of Berlin; Professor Strohmer, of Vienna; Professor Engler of Karlsruhe, and Dr. Duisberg of Leverkusen—the Kaiser's direct representatives; Professor Ludwig Knorr, of Jena; Professor Martin Freund, of the University of Frankfurt-on-the-Maine; the Italian, Portuguese, Japanese, and other representatives. Also Dr. Edward H. Morley (Honorary President), Dr. Harvey W. Wiley (Chairman of the Washington Committee), Dr. Hugo Schweitzer, Professor Marston T. Bogert, Mr. Maximilian Toch, Dr. Jokichi Takamine, and many others. Dr. David T. Day, of the Geological Survey, was Local Secretary, acting on behalf of the General Secretary, Dr. Bernhard G. Hesse, who remained at New York perfecting arrangements for Friday.

WELCOME!

Dr. Edward W. Morley expressed the cordial welcome of the chemists of the United States to visiting chemists of the wide world. Speaking for the representatives of both pure and applied chemistry, they took a special pleasure, he said, in welcoming those chemists from the four nations whose languages were the official languages of the Congress. Among those nations chemistry a hundred years ago had its origins—Dalton, Lavoisier, Liebig, Avogadro—and the progress of chemistry in these four countries had



AT THE WHITE HOUSE, WASHINGTON.

The Americans were more comfortable in the Southern heat in their flannel and linen suits than the visitors in their more ceremonial outfits.

been well worthy of those beginnings. At that time this land had just become an independent nation; difficult problems of popular government—the provision of elementary schools over half a continent had to be faced: chemistry had to wait. They welcomed with a great warmth of cordiality those nations who were thus their masters and teachers. He predicted that the next hundred years would see a wonderful development of science in America.

Dr. W. H. Nichols, on behalf of the great army of chemists, over six thousand being represented in all branches, and in the name of the great industrial organisations depending on their services, extended a hearty welcome. Referring to the alchemist of the Middle Ages, who worked alone, he said that this Congress was designed for co-operation and interchange of ideas. Another transmutation than that formerly sought for had been effected by modern chemistry, the useless was turned to useful, sometimes proving source of the greatest wealth. After referring in turn to the Presidents of previous Congresses, all of whom were still with them and two present that day, Dr. Nichols spoke of the magnificent achievement of the Secretaries in producing the twenty-four volumes of printed papers beforehand and to the element of novelty introduced by the aid of Mr. Edison and his staff in the recording of the discussions on the phonograph.

The U.S. Marine Band then played "The Star-spangled Banner," and after each national representative spoke in reply the band played the National Anthem of his country, the Japanese "Kimi-go-yo" being particularly effective.

Professor Dr. Rudolph Wegschneider spoke first for Austria and in German, which in different dialects was the chief official language of the day. Professor Leon Lindet spoke for France, paying a graceful tribute in his own tongue to the chemists of America; then Professor Dr. von Buchka, replying for Germany, spoke of what they had learned at the Berlin Congress and of the progress made since on the basis of that work. Sir William Ramsay was received with prolonged applause when he rose to express the thanks of the visitors. He said that they felt towards their hosts feelings deeper than those of ordinary friendship, which were perhaps crystallised in the old adage, "Blood is thicker than water"—they had their ancestry and their literature in common. Dr. Jokiehiro Emori, who is Professor of Chemistry in the Imperial University at Tokyo, and who spoke in excellent English, thought that no better place could have been chosen for the Congress than New York.

Professor P. Walden, for Russia, also speaking in German, on idealistic lines, said he was visiting a nation which is particularly friendly to his: it was the greatest ideal of the chemist to contribute to the good and happiness of all mankind. Another German speech was that of Dr. Treadwell, of Zurich, who thanked the Congress for the special invitation of the Swiss chemists. He returned to the United States after thirty years, and was taken aback by the great and startling development. He hoped that the bonds of friendship which join the great American Republic to the little Swiss Republic would become stronger and stronger and never be severed.

The Commandatore Giacomo Ciamician having echoed the Italian appreciation and thanks, Dr. Samuel Eyde, of Norway, was called upon to reply for other countries. He was introduced as having captured the entire atmosphere, in allusion to his work on atmospheric nitrogen. He said the real discoverer of America was Leif Erickson, a Norwegian, who landed in the New World in 1001—centuries before Columbus—and he considered him a good chemist also, as he made wine from the vines which he found on the New England shores.

Here a very pretty ceremony was interposed in that way which only Americans know how. A motion was brought forward, apparently without previous intimation by the Committee on Emblems, to the effect that badges numbered 1 to 20 had been set apart for the officers, and it was resolved to strike No. 1 in gold. With characteristic modesty Dr. Nichols preferred that No. 1 should be that of Dr. Morley, the Hon. President, and accordingly No. 2

was also struck in gold, and was then presented to Dr. Nichols. This little ceremony was the inspiration of Dr. George F. Kunz (of Tiffany's), and came as a surprise to the President. Dr. Nichols having acknowledged the gift, Dr. Wiley proposed that the thanks of the Congress be conveyed to the Daughters of the Revolution for the use of the building.

A message of congratulation was received from the 2,000 members of the International Congress on Testing Materials meeting in New York, the Chairman remarking that it arrived at the crucial moment.

At the White House.

*The President
requests the pleasure of the Company of*

*on Wednesday afternoon September fourth
Nineteen hundred and twelve
at half after four o'clock.*

So ran the simple copperplate card of invitation, and at that hour the East Room of the White House was comfortably filled with guests seated in a semi-circle awaiting the entry of Mr. Taft.

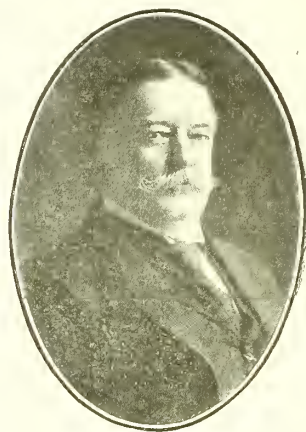
Presently, wheeled in his chair by a fine large negro footman, and escorted by three or four military aides-de-camp and the chief usher, while the U.S. Marine Band played "The Star-spangled Banner," the President passed through the up-standing and cheering company of chemists. Dr. Nichols expressed their appreciation of the fact that Mr. Taft had come at the cost of considerable physical pain and personal inconvenience from

Beverly Farms to receive them that day, adding, "He's a royal good fellow: he's here."

The President remained seated while he read a few words of welcome, his recent experience, he said, not being conducive to long or profound talk. After a few words of cordial welcome on behalf of himself and the people of the United States, he said that theirs is one of those Congresses they delighted to welcome; they represented research and application, and if there is any science more than another that goes to the heart of things it is chemistry. He did not pretend to know that subject well, and therefore he would address them on a subject he was more familiar with—that of their existing patent laws, as to which he said:

I observe that in your various divisions of your meeting you discuss many different questions not peculiarly chemical. I note a consideration of the question of patents—what patents ought to include, and what kind of a patent system ought to be adopted by each Government. Patents have played a very great part in the development of the United States, and we have given to patentees a very valuable monopoly for the purpose of discovering by their industries new methods of accomplishing useful results. Whether we have made this monopoly too great or not is now the subject of consideration by a Commission provided for by Congress. There is certainly great room for improvement in the machinery of our Patent Office, and it would be well if more value could inhere in the issuing of a patent as an evidence of real property. Now, however, until a patent has been fought through the courts, people do not seem to regard it as of a great deal of monopoly value.

Continuing, he said he would do away with, or greatly limit, their intermediate system of printed records, running often to 10,000 words, involving the attendance of an expert at \$50 a day and \$100 a day for a patent lawyer. He had no objection whatever to either, but they could have too much of both. He had come a long



PRESIDENT TAFT.

way to meet them, and he wished to emphasise as much as he could how much the Government and the people appreciated an organisation such as theirs, which makes for "team work in the world's progress." He was sorry the day was not so bright as they could wish, but in true democratic fashion he cordially invited them to meet him in what he said was sometimes colloquially called "the back yard of the White House."

Three rousing cheers having been given, the President was conveyed to the east side of the south lawn in his wheeled chair, experiencing great pain as he was almost lifted out of it to the large arm-chair which he occupied while receiving the visitors.

The scene on the lawn was a very brilliant one. Sitting facing the White House, with his injured foot carefully supported, the President shook hands with the guests of the nation for one hour and thirty-two minutes; there are now no receptions to the general public. His was no mere formal handshake: he had a kindly inquiry to make of every one, and would sometimes ask, "Are you a chemist?" because he wished to distinguish between a pure chemist and a "chemist capitalist." To Mr. William J. Evans, of Messrs. McKesson & Robbins, the Treasurer of the Chemists' Club, New York, he said, "You look to me as though you were meant to control great wealth." He would have a word of banter with an explosives chemist, for example; but in every case he had to know what kind of a chemist his guest was, and greeting him or her by name, previously announced to him by a military officer, would talk for quite a few minutes. Meanwhile the queue lengthened until the whole 1,000 present must have passed. The band of sixty or seventy performers discoursed exquisite music. Refreshments were also provided—the beautiful White House china, which is newly designed for each President, being much admired.

Pharmaceutical Chemistry Section.

Writing on September 10 our special representative says: The Pharmaceutical Chemistry Section has been



DR. G. D. ROSENGARTEN,
Chief Secretary of this Section.

one of the happiest of all. It is the youngest, and the President, Professor Remington, was anxious, as he mentioned in a brief introductory address, that it should put up a good record. I write when the bulk of the work has been completed, and can say that he has every reason to be proud of what has been accomplished. This section has not been represented so fully internationally as the Congress generally (there have been in the room at one time representatives of pharmacy in America, Great Britain, Germany, Austria, and Japan), but it has in a marked degree brought together leading exponents of the science and ethics of pharmacy and allied sciences throughout the United States. Every individual represented a large constituency—officers of the State Chemical Service in the departments of drugs, drug control, and plant improvement, professors in some of the quite remote colleges, and members of the State Board of Pharmacy of New York whose college is now a department of Columbia University. Mr. William C. Alpers, to whom this consummation was through many patient years in large part due, was present at one of the sessions. Professor Remington's genial personality made everyone at home and fostered a spirit of loyal support of his section equalled in few others—no small matter when possible attractions to be found in twenty-three other sections are considered, not to mention "possible attractions" in New York City itself. It is only necessary to supplement the cabled report with a few additional details.

Professor Remington's successful scheme was to group the papers and discussions upon one large subject into what became a symposium. Of the two chief topics, "Uniformity of Standards for Toxic Drugs and Drug-cultivation as Related Thereto" and "Unification of Methods of Analysis and Valuation of Essential Oils," the latter proved the more popular, and the hall was filled.

At the opening session at Columbia University, when the report on Toxic Drugs and the paper by Messrs. Ransom and Henderson on "Belladonna Cultivation" were read, there were present among others: Professor Jos. P. Remington; Mr. Otto Raubenheimer (Secretary); Dr. H. Veith (Knoll & Co.), Ludwigshafen; Leo Weber (Merck & Co.), Darmstadt; R. Lueders, Hamburg (The Obster Farbwerke); Dr. Geo. D. Rosengarten, Philadelphia; Dr. Virgil Coblentz (Squibb & Sons); Dr. H. V. Arny; Messrs. Benjamin Murray (Merck's); Caswell A. Mayo, Editor of the "American Druggist"; and Hugh Craig, Editor of the "Druggists' Circular"; Dr. R. H. Hatcham; Dr. Jokichi Takamine and his assistant, Mr. Keizo Wooyenaka; Dr. Joseph Kahn; Dr. E. A. May; Mr. Thomas J. Keenan, F.C.S. (all of New York or Brooklyn); Drs. Reid Hunt, Wilbert, and Atherton Seidell, of the U.S.A. Bureau of Chemistry; Dr. B. E. Butler, San Francisco; Dr. G. H. P. Lichthardt, City Chemist, Sacramento, Cal.; Mr. William Mair, F.C.S. (Edinburgh); Dr. Torald Sollman, Western Medical School, Cleveland, Ohio; Dr. Chas. E. Caspari, St. Louis; Dr. Metz, New Orleans; and Mr. J. H. Powell, Newark, N.J.

The paper by Mr. Francis Carr on "Belladonna Cultivation" was read in full in the absence of the author.

Messrs. F. A. Miller and W. F. Baker, Indianapolis, Ind., communicated a note on

THE POTENCY OF FIRST-YEAR CULTIVATED DIGITALIS-LEAVES.

The leaves were taken from plants grown from seeds of *Digitalis gloxinæflora*, mixed, a cultivated gloxinia-like strain of the official *Digitalis purpurea*, L. The soil consisted of equal parts of clay, loam, and decayed vegetable substance, mixed with a small amount of sand. Luxuriant rosettes of leaves were formed, showing a considerable range of leaf-variation. Full-developed and half-grown leaves in about equal proportions were used for testing. Drying was considered complete in twenty-four hours after placing in a drying-oven, the temperature of which was slowly raised to 100° C. The material in No. 60 powder then exhausted with 75-per-cent. alcohol, and the alcoholic



DIGITALIS.

Grown on the farm of Eli Lilly & Co., Indianapolis.

strength reduced to 25 per cent. before testing. Ten c.c. of tincture represented 1 gram of drug. The samples were all assayed at the same time by the one-hour frog-heart method at 20° C. The minimum lethal dose per gram body-weight for three tinctures from the

cultivated leaves was 0.0050, 0.0040, and 0.0030 c.c. respectively, for two tinctures from commercial leaves 0.0040 and 0.0025 c.c., and for a tincture from cultivated commercial leaves 0.0030 c.c. The authors consider that the results show that leaves from horticultural varieties are by no means inactive, and that leaves collected previously to the flowering period may be nearly or quite as active as second-year leaves from wild plants. There also appears to be a marked variation in the activity of individual plants.

THE ALKALOIDAL CONTENT OF DATURA STRAMONIUM AND OF DATURA TATULA.

was the subject of another communication by Mr. F. A. Miller, this time in conjunction with Mr. J. W. Meader. Individual plants of these two species were examined as regards alkaloidal content, in order to study the effect of cultivation and to select plants containing above the average amount of alkaloid. The seeds of *D. Stramonium* were purchased on the London market, while the *D. Tatula* plants were transplanted from a vacant plot in Indianapolis. The soil consisted of stiff clay loam. The leaves for assay were selected from plants of vigorous growth,



STRAMONIUM.

Grown on the farm of Eli Lilly & Co., Indianapolis.

the number removed not being sufficient to interfere with normal growth. The leaves of *D. Tatula* were collected on August 17 and those of *D. Stramonium* on August 30, when the plant of this species had attained a corresponding state of maturity. Individual assays of plants of *D. Stramonium* gave 0.47, 0.55, 0.52, and 0.46 per cent. of alkaloid, and of *D. Tatula* 0.47, 0.63, and 0.65 per cent. of alkaloid, thus showing a marked variation. Both species possess a higher percentage of alkaloid than the commercial drug during the past five years, while *D. Tatula* contains more alkaloid than the official *D. Stramonium*. The investigation is being continued.

DISCUSSING THE PAPERS

above referred to, Professor Remington said he had placed this subject first because of its great importance and its bearing on the pharmaceutical chemistry of the future. "The work is new," he said; "the idea is old." He regretted that Dr. Rodney H. True, of the Bureau of Chemistry at Washington, who has the Government's Plant Industry Department directly in his control, was not then present; doubtless they would have the benefit of his experience. The objects the papers aimed at was a consummation devoutly to be wished.

Mr. Mayo referred to Sir Edward Evans's *résumé* at Edinburgh of the work of their own Department of Agriculture. He was pleased to note the high commendation

of Sir Edward, and that this formed the basis of a recommendation to the British Government.

Mr. Raubenheimer referred to the fact that they had found it difficult to obtain belladonna-leaves which assayed 0.435 per cent. of alkaloid, and that the pharmacopœial standard had to be reduced to 0.43.

He believed in regard to digitalis that the wild-growing plant was more active than the cultivated.

Dr. Veith, who has specially studied digitalis, contributed in German to the discussion. They would always prefer, he said, the wild-growing plant, as they had a surplus and could supply the world. The German Government had made a study of opium in relation to soils and had found that opium grown in Germany and in Europe generally yields a high percentage of alkaloid. They sent a Commission to Asia Minor, where, of course, opium yielded 10 per cent. to 12 per cent. of alkaloids. This Commission had come to the conclusion that it is difference in climatic conditions which determines the difference in alkaloidal yield.* Somewhat similar results were observed in the study of digitalis, in which case it was found that the plant gave the best yield on what is known in Germany as *Bundessandstein*, or sandstone soil. Similar soil is found in the United States. Sunlight also, as was so well shown in Mr. Ransom's paper, is an influential factor.

Dr. Weber, also speaking in German, welcomed the communications and said that he need hardly state that they were particularly interested at Darmstadt in this line of research, a field in which they had long devoted their special attention.

Others contributing to the discussion were Professor Sollman and Dr. Kahn. We reserve the paper on Cannabis.

A RESOLUTIONS COMMITTEE.

Messrs. Veith, Reid Hunt, and Mair were appointed to draft a resolution to submit to the general meeting, and subsequently they reported as follows:

The Pharmaceutical Chemistry Section of the Eighth International Congress of Applied Chemistry, having received and discussed the report of the International Commission on "Variations in the Activity of Certain Toxic Drugs," resolves that it is desirable that this inquiry be continued, and that the International Commission be re-formed to consist of the following eight members:

Austria: Professor Wilhelm Miltacher.
France: Professor E. Bourquelot.
Germany: Professor H. Thoms.
Great Britain: Francis Ransom, F.C.S.
Netherlands: Professor L. van Itallie.
Russia: W. Ferrein, Mag. Ph.
Switzerland: Professor A. Tschirch.
United States: Dr. Rodney H. True.

And the following Secretaries:

George P. Forrester, F.C.S., European Continent.
Peter MacEwan, F.C.S., Great Britain.
Otto Raubenheimer, United States.

It is further resolved that this Commission be authorised to enlist the co-operation of other persons actively interested in promulgating international uniformity of standards for potent drugs and improvement in their cultivation and collection, and to report to the Ninth Congress.

In the course of the proceedings an address was presented to the Congress by the delegates of the New York State Pharmaceutical Association, which has completed thirty-four years for the betterment of pharmacy conditions and has 1,400 members. The address was read by Dr. Joseph Kahn.

Mr. William C. Alpers, New York, read a paper by Dr. George L. Schaefer (N.Y. Quinine and Chemical Co.) on

* The work of Dr. Thoms and his colleagues at Dahlem appears to be referred to.—EDITOR, C. & D.]



MR. RAUBENHEIMER.

"QUININE ALKALOID AND SOME OF ITS COMPOUNDS."

In this communication Dr. Schaefer explained that quinine alkaloid exists in four forms: (1) Anhydrous, (2) with water of crystallisation, (3) with hydrocarbons, and (4) with hydrocarbons and water of crystallisation. Quinine hydrate, U.S.P., contains $3\text{H}_2\text{O} = 14.4$ per cent., and if quickly heated H_2O is expelled, leaving 10 per cent. of water, the residue being hard, lumpy, and difficult to dry totally; the anhydrous residue melts at 173° to 174° C. If, however, the alkaloid with $3\text{H}_2\text{O}$ is heated slowly up to 45° to 50° C., keeping it at this for three hours, then raising it to 60° F., it becomes quite anhydrous, retains its white, fluffy appearance, and melts at 171° to 172° C. Mr. Schaefer also told how anhydrous alkaloid can be got by precipitation methods, and proceeded to speak of the second form. That with $3\text{H}_2\text{O}$ is not very stable; there are also crystals with $2\text{H}_2\text{O}$ and H_2O . The latter crystallises from solution in water at 80° C.; temperature, in fact, influences the amount of water in the quinine hydrate; at 30° C. a "salt" with $12\frac{1}{2}$ per cent. of water (air-dry) crystallises out, and the amount of water decreases with rise of temperature, the hydrate crystallising at 90° C. showing $4\frac{1}{2}$ per cent. and at 100° C. 0.5 per cent. The solubility in ether increases with the temperature of crystallisation; the 30° C. hydrate is soluble 1 in 26 of U.S.P. ether, 60° C. is 1 in 47, 80° C. 1 in 60, and 100° C. 1 in 62. Ether of sp. gr. 0.750 dissolves more—e.g., 1 of quinine hydrate in $1\frac{1}{2}$, and 1 of anhydrous alkaloid in 3. The third kind of salts are those of quinine with such hydrocarbons as benzol. If a hot solution of quinine hydrate 1 in 6 of benzol is shaken with a little dry sodium carbonate until clear, the liquid filtered and cooled, rhombic prisms first crystallise from it, and after twenty-four hours long silky needles follow, which consist of one molecule of quinine alkaloid and one of benzol. The fourth kind is allied to this. Thus, if to 1 of acetone and 2 of a hydrocarbon in a flask, as much water is added as the mixture may dissolve (it may be slightly milky), heat on a water-bath, and add about one of quinine alkaloid to form a concentrated solution: after filtering through cotton the solution yields crystals in a few days which consist of 2 molecules of quinine, 1 of hydrocarbon, and $2\text{H}_2\text{O}$. Such "salts" are mostly stable at ordinary temperature, and when dissolved in sulphuric or hydrochloric acid the hydrocarbon separates, except in the case of phenols. Combinations of this nature have been made with the following:

Benzine, gasoline, rhigolene, amyl acetate, ethyl acetate, acetylene hydrochloride, carbon bisulphide, benzol, toluol, xylol, dimethylaniline, nitrobenzol, paranitro-chloro-benzol, aceto-toluidine, and ortho-chloraniline.

Similar compounds are obtained when the following ethereal oils take the place of hydrocarbons:

Bergamot, chenopodium, caraway, lemon, cajuput, eucalyptus, fennel, juniper, lavender, mentha crista, pine, rosemary, phellandrum, rue, savin, amber, and turpentine, as well as terebene, pinene, terpineol, and terpinol.

Commenting on this paper Mr. Alpers said that the data given would be of great value to the Committee of Revision of the Pharmacopœia. Among other things it explained why the alkaloid when used for making elixirs, for example, is found to be variable in solubility and other factors, confusion resulting in consequence. Professor Remington emphasised that the point most difficult to settle for the Pharmacopœia was the most stable form of quinine alkaloid; they must not have a high degree of solubility for use only to-day, but an article that two years hence will have the same physical properties.

THE ESSENTIAL-OIL SYMPOSIUM,

which attracted so large an audience, consisted of the following papers:

"The Unification of Methods of Analysis of Essential Oils," by MM. Paul Jeancard and Conrad Satie, read by Dr. Clemens Kleber (Schimmel & Co.); and "Unification of Processes for Commercial Analysis and Valuation of Essential Oils," by Messrs. John C. Umney, F.C.S., and E. J. Parry, F.I.C.

Dr. F. V. Arny, of the New York College of Pharmacy, read the latter paper. The discussion was started by Dr. Edward Kremers, of Wisconsin University; and after a spirited discussion (which I must reserve for next mail) the following resolution was passed:

"Resolved that the International Commission of Congresses of Applied Chemistry be requested to organise an International Commission of chemical experts, whose duty it shall be to collect from every available source data on the volatile-oil industry and investigate the tests now in use to prove the identity and purity of commercial volatile oils, and to report to the Ninth International Congress a series of uniform and reliable tests for the more important of the volatile oils."

This requisition for the appointment of a Commission was subscribed by Dr. F. B. Power, Clemens Kleber, H. A. Seil, W. J. Wilbert, and Dr. Luders.

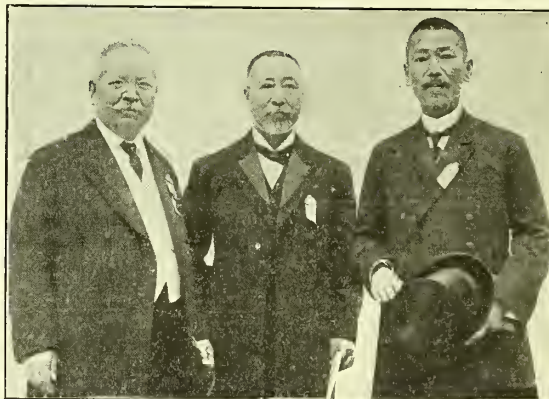
Another resolution, proposed by Mr. Gustav Drobegg (of Merck's), suggested

"Consideration of the feasibility of international standards of strength, purity, methods of testing, and nomenclature of pharmaceutical preparations."

It will be noticed that instead of taking papers as read in the absence of the authors, the President invited able



DR. ARNY.



JAPANESE CHEMISTS AT WASHINGTON.

The names from left to right are Dr. Jokichi Takamine (discoverer of adrenaline), Dr. T. Nishigawa (Japan Fertiliser Co., Tokyo), and Dr. Jokichiro Emori (Professor of Chemistry in the Imperial University of Tokyo).

men to study them and to elucidate them, which Dr. Kleber did with running comment begotten of his immense knowledge of his subject.

The Next Meeting.

NEW YORK, September 15.

(By Cablegram.)

The Final General Assembly of the Congress was held to-day in the Great Hall of the College of the City of New York, when the invitation of Russian chemists to hold the next meeting of the Congress at St. Petersburg in 1915 was accepted. Dr. Dimitri Konvaloff, of Moscow, was elected Honorary President, and Professor Paul Walden, of the Polytechnic Institute, Riga, was elected President.

GERMANY'S CHIEF SOURCES OF INCOME last year were derived from: Customs, 27 millions sterling; spirit-tax, 7,400,000*l.*; beer, 4,600,000*l.*; tobacco, 400,000*l.*; cigarettes, 1,100,000*l.*; sugar, 6,060,000*l.*; salt, 2,050,000*l.*; champagne, 400,000*l.*; matches, 700,000*l.*; lotteries, 1,700,000*l.*; land sales, 1,500,000*l.*; inheritance-tax, 1,500,000*l.*; and miscellaneous, 5,890,000*l.*

Variae.

MEDICINES FOR CUBA.—The Board of Trade are in receipt, through the Foreign Office, of translation of a Bill for regulating the introduction and sale in Cuba of foreign medicines, which has recently passed its first reading in the Cuban House of Representatives, but which is not on the list of Bills to be discussed during the present session. The measure provides that foreign pharmaceutical specialities may only be circulated in Cuba if the representative for their sale is a Cuban pharmacist, and if they comply with the following requirements: (1) The label must indicate the components to which the specific owes its medicinal properties, and the quantities of the same; (2) the Cuban Academy of Sciences must be satisfied that the preparation really has the properties advertised; (3) a consular certificate must be produced to the effect that the medicine has been made in laboratories working legally in the country of origin. The complete translation may be seen by British traders interested at the Commercial Intelligence Branch of the Board of Trade, 73 Basinghall Street, London, E.C.—*Board of Trade Journal*.

ANALYSIS BY MEANS OF CRYSTALLOGRAPHY.—Dr. A. E. H. Tutton, writing in the "Daily Mail" for September 13, states that the researches of Professor E. S. von Fedorow, of St. Petersburg, have extended the periodic law to crystallography, the slight differences of the interfacial angles of crystals following the order of progression of the atomic weights of the interchangeable elements in isomorphous series. Barlow in England and von Fedorow in Russia conceived the internal structure of crystals as of a space lattice character, and have received "most marvellous confirmation" from the work of Professors Röntgen and von Groth in Munich, who have utilised the exceedingly short wave length of the Röntgen rays to provide definite evidence by diffraction photographs of the cubic lattice space in crystals of zinc blende. This means that the molecules in the crystal and their arrangement have been made visible. Professor von Fedorow has experimentally determined the "form symbols" of 10,000 substances. This enables a few measurements with a goniometer, followed by some simple calculations, to enable identity of an unknown crystal to be established, and, it is claimed, thus rendering chemical analysis "superfluous."

"THE CREATION OF ENTHUSIASM."—A very worried-looking Chancellor of the Exchequer in his shirt-sleeves is depicted by Mr. Raven Hill in "Punch" this week, engaged in a fearful chemical experiment. Underneath a tripod is a road-mender's brazier, which the experimenter is blowing (on the top, if you please) with a pair of bellows. Resting in the tripod is a glass retort of about 2-gal. capacity, and more than half-full with "Single land-tax." The mouth of the retort is plugged with cork and tube; to the latter a piece of enema-tubing is attached, the other end being placed on one of the tubes inserted in a cork which closes a mineral-acid carboy; the second glass tube also carries a piece of enema-tubing to a Winchester wash-bottle filled with "Budget, 1910," this again being attached to a second Winchester quart (unlabelled), which in its turn is connected with a gas-bracket. As an example of apparatus-fitting the cartoon is not worth reproducing in these pages, but the point is in the experimenter's exclamation: "I think Professor Schäfer must have been misinformed. I see no signs of life." By the way, the chief cartoon, "The Heart of Midlothian," is medical in character, for it represents Dr. Asquith and Dr. Bonar Law "sounding" a patient through a binaural stethoscope, each specialist having a limb of the instrument in his ear. They say things to each other about the patient's condition, and he, sturdy man, seems to be Keir-Hardie in a kilt.

THE CHARTIST CHEMIST.—Potts was a chemist and a Chartist. As a chemist he was a peaceful little man, who would give you a dose, or a blister-plaster, or a "sudorific mixture"—he was great on that—which would put you right in almost less than no time. But as a Chartist he was a fiery, thunderous person, swelling visibly when he felt the blood within him boil over thoughts of "them Tories." Potts wanted to do something for the cause. So he called himself Citizen Potts. He went further. He cleared out his shop-window, which was in a prominent position in the centre of the town, and in place of useful concoctions for healing people of ailments he decorated his window with weapons of war. To one side he stacked a collection of pitchforks, scythe-blades on poles, and other fearsome things, and these Citizen Potts labelled "Lancets for bleeding Tories." Then he placed in the window a huge canister of gunpowder, and labelled it "Powders for Tories." And lastly he erected a little pile of cannon-balls, which he called

"Pills of various strengths for Tories." The end of the story is less valorous. A descent was made on Potts's war-like window, and Potts thought it better to make himself scarce. Which he did. Representatives of law and order impounded Citizen Potts's lancets, powders, and pills, and the "pills" now occupy an interesting position in the Trowbridge Police Station, and serve to keep warm the memory of one who has lain for many years in the grave.—*Daily Chronicle, Western Edition*.

BUSINESS CHANGES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

Mr. T. J. OAKELEY, chemist and druggist, has opened a business at Thatcham, Berks.

THE OXFORD DRUG CO., LTD., are removing their business from Broad Street to other premises in Oxford.

Mr. J. W. PRIVETT, chemist and druggist, has purchased the business of Mr. C. A. Coles, chemist and druggist, of Old Road, Clacton-on-Sea.

Mr. T. LAMB, Ph.C., has taken over the business of Mr. A. D. F. Patten, pharmacist, at Station Road Pharmacy, Forest Hall, Newcastle-on-Tyne.

Mr. S. G. BAKER, chemist and druggist, Greenwich, has purchased the business of Mr. S. Furnival, Ph.C., 7 High Street, Windsor, which he will carry on as a branch.

National Health Insurance.

There were sixty-eight applicants for the three posts as tuberculosis officers under the Essex County Council, at a salary of 500*l.* per annum, in connection with the temporary scheme for dispensaries in the county.

The National Health Insurance Commission (England) point out that insured persons must either join an approved society before October 26 or become deposit contributors, and that societies, if approved after that date, would consequently be unlikely to secure any substantial number of members for State insurance.

The report of the Sanatoria Sub-Committee (of which Dr. A. R. Moody is Chairman and Mr. Edmund Jones, Hanley, is Vice-Chairman) was considered by the Stoke-on-Trent Insurance Committee at the Hanley Town Hall on September 13. A resolution was passed that a tuberculous patient having chosen his medical attendant should not be allowed to change for six months without the consent of the committee. The other proposals adopted include the payment of 1,666*l.* to a sanatorium provided by a joint board of six authorities, at which twenty-one beds would be reserved on behalf of the committee, and the provision of one dispensary system, for which an annual payment to the Corporation of 823*l.* is guaranteed. Hospital treatment (twelve beds) would absorb another 1,000*l.*, leaving 1,511*l.* of the total sum of 5,000*l.* available for domiciliary treatment. The medical officer said he thought satisfactory arrangements could be made with medical men.

The Brighton Insurance Committee on September 12 received a letter from the local division of the British Medical Association stating that in view of the appointment of Dr. Duncan Forbes (medical officer of health) as chief tuberculosis officer for the borough, no useful purpose would be served by a conference with the Sanatorium Sub-committee. The doctors had previously consented to meet and co-operate with the committee, subject to their acceptance of the principles laid down by the British Medical Association. Mr. W. H. Gibson, F.C.S. (Chairman of the Sanatorium Benefit Society) said he felt sure they would not suffer much from the action of the doctors. Lucrative positions such as were offered under the Insurance Act were soon snapped up, and local medical men were not so well off that they could ignore them. There was not the slightest doubt that they would get a sufficient number of well-qualified medical men to carry out the duties of the sanatorium-benefit scheme.

MEDICAL GLEANINGS.

Grey Hair.

MR. G. LENTHAL CHEATLE some years ago pointed out that there is reason to believe that a nervous influence exists in some cases which can induce greyness of hair. Returning to the subject ("British Medical Journal"), he mentions two cases in which greyness of the hair is associated with other nerve lesions, and therefore probably connected with nervous changes.

Treatment of Styes.

MR. J. B. H. HOLROYD puts forward in the "British Medical Journal" the following scheme of treatment for styes:

The general treatment consists in putting the patient under as good hygienic conditions as possible, including an abundant supply of fresh air both day and night, attention to diet, and a course of tonic treatment. For children syr. ferri phosph. mxv. in half an ounce of water is quite satisfactory.

The local treatment depends largely on the state of the disease. If acute, hot boracic fomentations are very effective; they should be applied every four hours. An alternative to these dressings is the hot pad made by one layer of white lint and three of flannel covered on the outer (flannel) side with oiled silk. The whole pad is then wrung out with hot water and applied as an ordinary fomentation. If the case is somewhat advanced, the following method of procedure is indicated: (a) The eyelids are bathed every four hours with the lotion of boric acid gr. x., borax gr. v., glycerin mx., in an ounce of water, and all crusts and discharge are thoroughly removed. (b) The conjunctival sacs are irrigated with the same lotion every four hours, and guttae argyrol 5 per cent. afterwards dropped in the sacs three times a day. (c) The following ointment is applied three times a day to the eyelids: Hydrarg. oxid. flav. gr. ij., paraf. moll. ad ʒi.

The special treatment consists in taking a specimen of the pus and having a vaccine prepared and injecting the patient at intervals. This line of treatment is indicated when the condition has gone on for some considerable time, and resists all general and local treatment.

Effect of Cold and Heat.

THE APPLICATION OF COLD AND HEAT to parts of the human body is a well-known practice in combating disease, but the physiological action is not so well understood. The "American Medical Journal" states the action to be as follows: The temporary application of cold to a part of the body produces a contraction of the peripheral blood-vessels, which is followed in a vigorous individual by a reaction which causes a dilatation of the vessels, and a freer flow of blood through the part. A similar application of heat causes the dilatation of the blood-vessels without the preliminary contraction. The hot application is, therefore, less stimulating to the nervous system than the cold. Too long an application of cold causes a paralysis of the cutaneous muscles with a passive dilatation of the vessels, resulting in a passive congestion, but an actual hindrance to the passage of blood through the part. A prolonged application of heat results in a similar paralysis of the blood-vessels. The general effect of cold is that the heart is stimulated to an increased effort to maintain an active circulation, and as long as the resistance to the cold is effective and the peripheral circulation is maintained, a general tonic effect is produced. The general effect of heat is quite different. If the temperature is above 104° F., a slight initial stimulation of the blood-vessels may occur, but this is followed by dilatation with steadily falling blood-pressure. This results in rapid beating of the heart in its effort to maintain the pressure at its proper level. The general temperature of the interior rises, the vessels of the abdomen may dilate, and the fall of blood-pressure may be so great as further to weaken the heart, leading to cerebral anæmia, vertigo, and faintness.

TRADE REPORT.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, London, E.C., September 19.

THERE is no improvement to record in business this week, the price movements being few and slight. Arsenic has taken another upward turn, due to scarcity and persistent demand. Ammonia sulphate is on the easier side, and oxalic acid is also cheaper. Copper sulphate is unaltered. Cream of tartar is firmer at unchanged rates. Quinine is weak. Morphine, codeine, and santolin are unchanged. Among drugs damiana-leaves are cheaper. Areca continues scarce; balsam Canada is firmer; chamomiles are steady. Menthol continues very firm, and opium is steadier, although quiet. In essential oils star anise is very firm. American peppermint is still tending upwards, with a more active demand. Both Bourbon and Algerian geranium oils are dearer. Spearmint has been selling at an advance. French lavender is a trifle cheaper. The principal changes are as under:

Higher	Firmer	Easier	Lower
Arsenic	Antimony	Ammonia sulphate	Asafetida
Colocynth	Balsam	Honey	Damiana
Geranium oil	Canada	Kola	Oxalic acid
Hydrochloric acid	Benzoin (Sumatra)	Lavender oil (Fr.)	Quicksilver (sec. hands)
Pepper	Canary seed	Orange oil	Sarsaparilla (grey and native Jam.)
Peppermint oil (Amer.)	Morphine		Wax, bees (Jamaica)
Spearmint oil			

Cablegram.

NEW YORK, September 18.—A steady business is being done in drugs. Opium is firm at \$7.60 per lb. for drug-gists'. Peppermint oil is firmer at \$2.60 per lb. for tin oil. Cartagena, ipecacuanha has advanced to \$2.10. Copaiba is easy at 48c. for Central and South American. Balsam Canada is steady at \$5 per lb. Balsam tolu is firm at \$1.75. Cascara sagrada is quiet at 8c., and Curaçao aloes is steady at 11c. per lb.

Manchester Chemical-market.

September 18.

The market for heavy chemicals continues quiet, but steady. Were it not for demand on export account in this department it would be extremely quiet, although there are rumours of a revision in prices of bleaching-powder and caustic soda; these do not seem to have materialised up to the present. There is, however, little doubt that before long, owing to the higher asking prices for slack and engine fuel, there will be a more or less substantial advance. Meantime bleaching-powder is fairly active for export, and there is more disposition on the part of buyers to cover next year's requirements. Makers, however, are not anxious sellers for forward delivery. Contracts still rule at from 4*l.* 7*s.* 6*d.* to 5*l.* per ton in softwood casks on rails. Chloride of calcium has been advanced 5*s.* per ton, and now rules 2*l.* 7*s.* 6*d.* to 2*l.* 12*s.* 6*d.* per ton. Crystal carbonate quoted 6*l.* 7*s.* 6*d.* to 6*l.* 10*s.* per ton in 2-cwt. bags. Nitrate of soda in better demand. Muriatic acid is dearer, and vitriol is in active general demand. Pearl and potashes are quiet. Yellow prussiate of potash is in fair request. Lead products rule dearer owing to the sharp advance in the raw metal. Nitrate is quoted 3*l.* per ton delivered Manchester. Sulphur is in fair inquiry. Flowers are quoted 8*l.* 10*s.* to 8*l.* 15*s.* per ton in 2-cwt. bags, roll 6*l.* 15*s.* in 3-cwt. barrels,

rock 5*l.* 10*s.* to 5*l.* 15*s.* per ton in 3-cwt. bags, and recovered 4*l.* 12*s.* 6*d.* to 4*l.* 15*s.* per ton f.o.r. at works. There is again a hardening feeling in white powdered arsenic. Sulphate of copper rules strong, but quotations are variable, according to delivery. Coal-tar products steady. Sulphate of ammonia 14*l.* 12*s.* 6*d.* to 14*l.* 13*s.* 9*d.* per ton f.o.r. Manchester.

Linalol.

With reference to the statements made by H.M. Consul at Tamsui regarding linalol (see *C. & D.*, September 14, index folio 454), we have obtained samples from the Board of Trade, and find that they do not possess the characteristics of pure linalol. We understand that the Board of Trade has supplied large manufacturers with samples, and we also learn from Mr. John C. Umney, who has had the opportunity of investigating these, that the statements in respect to the price of linalol are quite exaggerated. Mr. Umney is going fully into the matter.

Olive Oil.

In the course of a circular issued by a Liverpool firm, dated September 6, it is stated that after fair sales were made at steadily advancing prices, further business has been checked by the restricted supplies available in all U.K. markets, and the reluctance of holders to part with their stocks, in view of the increase of cost to import and the impossibility of replacing on basis of prices recently paid here. Spot closing values at Liverpool, Goolie, and Hull per ton are for Galipoli 59*l.*, Malaga 50*l.* 10*s.*, to 51*l.* 10*s.*, Seville 50*l.* to 51*l.*, Candia 50*l.* to 50*l.* 10*s.*, Smyrna, Baidir, Aidin, etc., 49*l.* 10*s.* to 50*l.*, and Adramity, Aivali, Mitylene, etc., 49*l.* 10*s.* to 50*l.* In the arrival market prices in all shipping countries have been steadily advancing, but business latterly has been difficult, as, although there is good inquiry, both for prompt and winter shipment, stocks at shipping ports are small, and shippers will not venture to sell new-crop oil in the face of the deplorable prospects in the various producing countries. The latest quotations range from 50*l.* to 51*l.* 10*s.* c. and f. and c.i.f. for Spanish, Candia, Levant, and Ionian, but these prices are nominal, as, on the one hand, it is impossible to find sellers in quantity, and, on the other, buyers wishful to purchase are reluctant to pay these advanced prices. It is now known how the various crops are likely to turn out, and reports received within the last few days are as follows: Italy poor. Spain bad, practically a failure, except perhaps in some districts which produced little oil last year. Ionian—no crop, as fruit has fallen owing to unfavourable weather. Candia—reports from all parts of the island point to a practically total failure. Levant—practically no crop, except in Aidin district, where one-fourth of a crop is estimated as a possibility, provided early rains save what fruit remains on the trees. Fine oils for edible and pharmaceutical purposes are in limited supply, and with these oils required mostly for home consumption, shippers offer very sparingly. Fine Ionian oils are quoted 60*l.* to 65*l.* c. and f.; good quality, 52*l.* 10*s.* to 53*l.* c. and f.; and fine Levant oils, 56*l.* to 57*l.* c.i.f., and prices are advancing. Green sulphur olive oil.—With the poor crop prospects in Italy, Greece, and Spain, shippers are now requiring dearer prices, and to-day's quotations for good green oil are 31*s.* 9*d.* to 32*s.* per cwt. c.i.f. for Italian and 31*s.* to 31*s.* 6*d.* per cwt. c.i.f. for Spanish. Stocks at shipping ports are very small. Green olive-oil soap has also advanced, and prices are likely to rule high. The present quotations for shipment up to end of the year are: 56 to 58 per cent. 21*l.* 10*s.* per ton, 58 to 60 per cent. 22*l.* 5*s.* per ton, 60 to 62 per cent. 23*l.* per ton, and 62 to 63 per cent. 23*l.* 10*s.* per ton c.i.f. Liverpool or Hull, net cash.

The Turpentine Market.

Although the fall in the price of turpentine has already proceeded a good deal further than seemed possible some months ago, the tendency is now towards resistance to the feeling of pessimism which was aroused by the remarkable expansion of the American receipts. The export surplus for Europe has thus grown very considerably, and the imports into the United Kingdom for the eight months are materially in excess of last year. Our market, of course, has been largely dominated by the persistent drooping tendency of American quotations in the face of continued liberal receipts from the interior, which has naturally checked speculative support here. Assuming that, as suggested in some quarters, supplies in first hands have been already largely marketed, the time is perhaps not far distant when a change of feeling may become manifest and lead to a rally in the American market. As it is, prices are already abnormally low in the neighbourhood of 30*l.* to 31*l.* per ton for near delivery, and dealers on this side are not keen to offer forward delivery even at a premium of about 30*s.* per ton over the price of spot. Consumers have been buying very sparingly for weeks past, but do not stand to gain much

by postponing orders unduly. Buyers naturally enough are prejudiced by the accumulation of stocks on this side. The London stocks on September 7 have increased to 31,843 barrels, which is about 9,276 barrels in excess of a year ago and nearly double the quantities which were held two years ago. The quantities afloat, too, are heavy, this making the total London visible supply on the date mentioned as much as 52,187 barrels, compared with 33,846 and 23,463 barrels respectively, at the same time in the previous two years. Thanks to the big fall in prices, the outlet has been this year materially stimulated. The total London deliveries since January 1 amount to nearly 60,000 barrels, this showing an increase of about 11,300 barrels and 9,200 barrels respectively against 1911 and 1910. At the present low price ruling for American spirit it is obvious that there is not much inducement for consumers to use substitutes, and the margin of value is now very small compared with what it used to be. The outlet for Russian spirit has been curtailed for the present.

London Markets.

AMERICAN DRUGS.—The following are current quotations for original packages of barks, herbs, leaves, and roots for shipment from the U.S.A. on c.i.f. terms, to arrive unless otherwise indicated: *Barks*.—Bayberry, 30*s.* to 32*s.* per cwt.; black haw of root, 11*d.* per lb.; dogwood, 4½*d.*; elm, 5½*d.*; euonymus or wahoo of root, 1*s.* 5*d.* net (on spot); sassafras, 7*d.* (on spot); wild cherry, 4½*d.* net to arrive. *Herbs*.—Lobelia, 5½*d.*; scullcap, 9½*d.* *Leaves*.—Damiana, 5½*d.*; witchhazel, 3*d.* *Roots*.—Blueflag, 6½*d.*; burdock, 5½*d.*; elecampane, 5½*d.*; gelsemium, 3½*d.*; culvers, 7½*d.*; mandrake, 32*s.*; bloodroot, 5½*d.*; serpentary, 1*s.* 6*d.* net on spot; and stillingia, 4½*d.* per lb.

AMMONIA SULPHATE.—Dull and easier. Grey 25-per cent. London prompt is quoted 13*l.* 6*s.* 3*d.*; Hull prompt 14*l.* 10*s.*; Leith prompt 14*l.* 15*s.*, January-June 14*l.* 17*s.* 6*d.*; Liverpool prompt 14*l.* 12*s.* 6*d.*, January-June 14*l.* 16*s.* 3*d.*; Beckton 25 per cent. prompt 14*l.* 2*s.* 6*d.* per ton.

ANISE OIL (STAR).—The spot value for "Red Ship" is from 6*s.* 1*d.* to 6*s.* 2*d.*, and to arrive 5*s.* 9½*d.* c.i.f. is quoted.

ANISEED is unchanged at 24*s.* to 25*s.* 6*d.* per cwt. for common to fair Russian.

ARSENIC has advanced a further 30*s.* per ton to 22*l.* in barrels and 23*l.* in kegs for best white Cornish powdered. This further advance is due to the continued strong demand, which is close up to the production.

BALSAM CANADA is firmer at 2*s.* 6*d.* per lb. net to arrive, in tins in cases.

BERGAMOT OIL.—For January shipment new crop, guaranteed 38 per cent. esters, is quoted 27*s.* c.i.f.

CANARY-SEED is firmer, with a little more business doing. Turkish afloat is offering at 57*s.* 6*d.* per quarter c.i.f. terms, and good Morocco at 65*s.* to 66*s.* on the spot.

CARAWAY-SEED is firm at 34*s.* per cwt. for fair Dutch.

CASTOR OIL.—Hull make of pharmaceutical quality is quoted 32*l.* per ton in barrels, and January-June 1913 delivery at 31*l.*; first pressing is 29*l.* 10*s.* and 29*l.* respectively, delivered free on wharf London; oil in cases 50*s.* per ton extra. Belgian firsts is 29*l.* 10*s.* for prompt and forward in barrels, ex wharf London. In Liverpool good seconds Calcutta is quoted 3½*d.* per lb., and first-pressing Belgian at 3½*d.*

CHAMOMILES.—The arrivals include 69 bales from Belgium. Prices show little variation on the week, good white flowers being quoted at 90*s.* and medium size weather-stained at about 79*s.*; the bulk of what is offering consists largely of this quality, and there is quite a scarcity of prime white.

CHAULMOOGRA OIL for October delivery is quoted 3*s.* 3*d.* per lb.

CHIRETTA.—The market is overweighted with the recent arrivals, and with a limited demand the undertone is easy, quantity being obtainable at 4½*d.* to 5*d.* per lb.

CINCHONA.—The auction to be held at Amsterdam on October 3 will consist of 11,464 packages Ledgeriana, hybrid, etc., 701 cases and 1,203 bales Succirubra, or 13,368 packages in all, weighing about 1,169,057 kilos. The first-hand stock at Amsterdam on September 12 consisted of 6,175 packages Government and 25,104 packages private

bark, making 31,279 packages, including the first-hand quantities to be offered at the above-mentioned auction. Java shipments for first half September, 644,000 Amst. lb.

CITRONELLA OIL.—Business to arrive has been done in Ceylon oil at 1s. 4d. per lb. c.i.f., and on the spot a limited quantity is obtainable at 1s. 8d. In the drug-auction eight cases of Ceylon guaranteed to pass Schimmel's test were limited at 1s. 8d. per lb.

CLOVES.—At auction 80 bales Zanzibar were bought in at 7½d. for fair, and 15 cases Penang at 11d. for good. Privately sellers quote fair on spot at 7½d.; to arrive, October-December shipment is quoted 7½d. c.i.f., and January-March buyers at 7½d. c.i.f. d.w., while October-December delivery is quoted 7½d. sellers and January-March 7½d. c.i.f. To-day a good business done at 7½d. for October-December delivery.

COD-LIVER OIL.—Our Bergen correspondent writes on September 16 that the market tendency is again firmer, and finest non-congealing Lofoten oil has been sold up to 72s. per barrel c.i.f. The exports from all Norway up to August 31, 1912, amount to 33,150 barrels. In London agents quote from 69s. to 70s. per barrel c.i.f. terms.

CORIANDER-SEED has been selling freely at 10s. 9d. to 11s. per cwt. for sound old-crop Morocco. The quotation for new crop is 12s. c.i.f. terms, but no business has been done lately.

CREAM OF TARTAR.—Although prices are unaltered the market has a firmer tendency, and supplies are scarce; makers are unwilling to take fresh business until January next year; 98 per cent. powder is quoted 89s. and 95 per cent. 87s.

CUMIN-SEED sells slowly at 22s. to 23s. per cwt. for Morocco. The price for Malta is 28s. c.i.f. terms.

FENUGREEK-SEED is firm, with some retail trade at 10s. 3d. per cwt. for Morocco.

GERANIUM OIL is much dearer. The stocks of Algerian are extremely small, and there has been a substantial advance since we last quoted, 29s. per lb. being asked, and for Bourbon, which also follows the advance, 70f. per kilo., or 26s., is quoted.

GOLDEN SEAL is quoted at 18s. 6d. per lb. net, c.i.f. terms, for summer-dug, and on the spot the value is about 19s.

LAVENDER OIL.—A French distiller writes that the distillation has on the average been less, and the prices asked by the peasants are higher as compared with last year; on the other hand, the number of peasant distillers at work has probably never been greater, and in view of this fact the tendency eventually proved easier, with quotations fluctuating. The new crop of Mont Blanc of first quality is quoted 16s. 2d., and second quality 14s. 9d. per lb.

LEMON OIL.—Prices cabled from Sicily show no substantial change from last week, prompt delivery offering at 7s. 9d. to 8s., and new crop for forward delivery at 7s. 1d. to 7s. 4d. per lb. c.i.f. Spot is quoted 8s. per lb.

A private advice from Sicily dated September 11 reports a quieter market, no fresh orders having been received from U.S.A. An abundant rainfall during the previous week improved the outlook for lemons, the market for which is unsettled. This year, it is said, 75 per cent. of the lemons have not been sold to the oil-pressers, as the owners ask exaggerated prices, whereas this time last year 75 per cent. had already been sold.

A Palermo advice dated September 14 states that although spot business has not been as active as during the previous week, it has been sufficient to keep prices firm and unchanged; for new crop, the tendency of which was uncertain during the first part of the week, became gradually firmer towards the end, as it appears speculators have been buying readily at full prices. Business with foreign consumers was not active, but the local transactions, together with the few orders which were received from abroad, readily absorbed the offerings, which were not large.

LINSEED has been steady at 64s. to 68s. per quarter for ordinary to fine Dutch, and 66s. to 67s. for good bold Morocco.

MENTHOL remains very firm, a limited quantity offering at 28s. 6d. spot for Kobayashi-Suzuki, at which small sales have been made; tendency is still upwards, with few sellers.

The exports from Japan during July were 932 kin only, valued at 11,572 yen, against 8,506 kin, valued at 75,317 yen, in July 1911. For the seven months ending July the exports have been:

	1910	1911	1912
Kin ...	61,206	65,412	75,033
Yen ...	317,294	484,690	802,970

The exports of *peppermint oil* from Japan during July were 1,249 kin, valued at 4,554 yen, against 8,038 kin, valued at 26,551 yen, in 1911. For the seven months ending July the exports were:

	1910	1911	1912
Kin ...	92,617	84,387	98,287
Yen ...	283,336	282,223	354,058

MILK-SUGAR.—The presence of parcels of poor quality is again giving rise to trouble on the market, and several lots of such have been rejected by buyers. For best white powder 63s. to 64s. is quoted.

MORPHINE.—All the makers are asking the same price for hydrochloride powder—viz., 10s. 6d. per oz., that being the inside figure.

OPIUM is about steady, with 11-per-cent. Turkey druggists' offering at 19s. 6d. c.i.f., and on the spot this test has been done at 21s. 6d. Small sales of fine selected Tokats have also been made at 27s. The *Tangistan* has brought 140 cases from various Persian ports; the bulk is proving to be of very low test.

A Smyrna correspondent writes on September 6 that the sales this week amount to thirty-five cases, twenty-seven of which are for consumers, and the balance for account of Interior and local speculators, at 21s. to 23s. as to quality. Holders firmly maintain the position, and will do so until fresh orders from the U.S.A., Japan, and other consuming markets come forward. Most dealers again expect last year's figures of 25s. to 30s., and we much fear these expectations will be realised, for our crop is under 6,000 cases, and stocks are short in every consuming centre. Besides this, Japan will buy largely this season, as the Persian drug, owing to very high figures, is a closed door to them. The arrivals in Smyrna amount to 1,119 cases, against 525 at same date last year.

A Constantinople correspondent writes on September 13 that the sales for the week were five cases, at 280 to 290 piastres per oke, according to quality; market is quiet. In spite of the claims of holders of soft-shipping, several of whom have received instructions from the Interior not to sell at present prices owing to the slowness of arrivals on the respective markets, we can foresee a reduction in prices next week, providing speculators do not again try to advance prices. The arrivals in Constantinople amount to 1,555 cases, against 746 cases; these consist of 867 druggists' (1911, 522 druggists'), 440 "soft" (1911, 217 soft), Malatia 248 (1911, 7 Malatia). The stock amounted to 1,282 cases, against 546, and consisted of 707 druggists', 380 soft, and 195 Malatia, as compared with 338 druggists', 183 "soft," and 25 Malatia at the corresponding period of 1911.

ORANGE OIL.—A Palermo advice dated September 14 reports a slightly easier market, and with a firm order a slight advantage might be obtained on previous prices. *Sweet* of the last crop is quoted 8s. 3½d., new crop 7s. 6¾d., and *bitter* of the last crop 8s. 4½d. per lb., c.i.f. London.

ORANGE-PEEL.—For fine-cut bright strip 9d. is asked.

OXALIC ACID is cheaper at from 2½d. to 3d. per lb. net, delivered free London.

POTASSIUM IODIDE.—The exports from Japan during July were 3,127 kin, valued at 15,122 yen. For the seven months ending July they were:

	1910	1911	1912
Kin ...	35,730	29,512	35,951
Yen ...	161,224	134,181	162,766

Of *crude iodine* the exports in July were 1,131 kin, and for the seven months the figures are: 1910, 6,023 kin; 1911, 7,839 kin; and 1912, 9,444 kin. The *Orita*, from Antofagasta, has brought 301 barrels to Liverpool. Japanese is quoted at prices close up to those of British make—viz., 9s. 8d. per lb. net, as compared with 10s. 6d., less 5 per cent., for British.

PEPPERMINT OIL.—American tin oil is dearer; a fair quantity has been sold at 10s. 9d. to 11s. to come forward, but several sellers are now without quotations, and in one quarter 11s. has been refused, 11s. 6d. being asked.

there being sellers of spot lots at this price also. H.C.H. is quoted 15s. to 15s. 3d.

QUICKSILVER.—First-hands remains unchanged at 8l. 5s., but second-hands offer at 8l., being a reduction of 1s. 6d. on the week.

QUININE is weak. A sale of 20,000 oz. B. and S. and (or) Brunswick has been made at 8½d. per oz., at which there are further buyers.

At the auction held at Amsterdam on September 13, 1,417½ kilos. (50,000 oz.) Ed. II. was offered, of which 708½ kilos. (25,000 oz.) sold at fl.13.50 per kilo., against fl.14.13½ per kilo. at the previous auction. The next auction will be held on September 27, when a similar quantity will be offered.

SAFFRON remains very firm at from 47s. to 47s. 6d. per lb. net.

SASSAFRAS OIL.—For American natural, guaranteed genuine, 3s. is quoted, and 1s. 4d. for artificial.

SENEGA.—Eleven bales have arrived from Montreal. Privately 2s. 8½d. to 2s. 9d. per lb. spot is quoted according to holder and 2s. 7d. c.i.f. to arrive.

SHELLAC is firm but quiet, fair TN Orange offering at from 67s. 6d. to 68s.; November-December shipment of TN is quoted 67s. c.i.f., and for AC Garnet 61s. 6d. c.i.f. has been paid for January-February steamer. Futures are firm, the sales including October at 68s. 6d., December at 69s. 6d., and March at 71s. to 72s.

SPERMINT OIL.—Business has been done at 16s. 9d. per lb. in one quarter, but this price has since been withdrawn, and at the close 18s. 6d. is quoted.

SPERMACEIT.—American refined is quoted at 11d. per lb. ex warehouse.

TONKA-BEANS.—Angostura remain very scarce, small lots being obtainable at 21s. 6d., extra bold frosted Para at 13s., and ordinary 12s. per lb.

TURPENTINE.—American closes at 30s. 9d. to 31s. on spot and 31s. for September delivery.

A monthly review states that the recent fall in prices appears to be due to heavier receipts at Savannah and other points on the U.S.A. and manipulations, as from the amount of business doing on this side, both with trade-houses and speculators, one would normally look for a rise. There have, however, been some speculative resales, which would tend to weaken values; we continue to look for higher prices.

London Drug-auctions.

At the auctions of first-hand drugs there was an absence of life, and values generally were mostly in favour of buyers. Cape aloes sold at irregular but rather easier rates, the quality being also irregular. Curaçao aloes in gourds was neglected. Asafetida was plentiful, but in the absence of American orders prices were lower. Buchu was quiet, and Sumatra benzoin firmer. Cardamoms realised very firm but unaltered rates, and for cascara sagrada easy prices were paid without reserve. Colocynth apple has been advanced, and for gamboge pickings good prices were paid. Honey was generally easier, especially in the case of St. Lucia, which declined 1s. to 1s. 6d. Very little ipecacuanha was offered, and that held for higher rates. Rhubarb is steady but so far the floods in the China producing districts have not appreciably affected prices. Sarsaparilla was about 2d. easier for grey Jamaica, and 1d. for native red Jamaica. Tinnevely senna was in small supply, but a fair quantity will be offered at the next auction. Jamaica beeswax was 2s. 6d. cheaper, Madagascar being steady. The following table shows the quantity of drugs offered and sold:

	Offered	Sold		Offered	Sold
Aloes—			Cannabis indica ...	4	0
Cape	30	20	Cardamoms & seed	110	59
Curaçao (gourds)	666	2	Cascara sagrada	208	62
Zanzibar (cases)	11	0	Cashew-nuts	126	33
Ambergris ... (box)	1	0	Chiretta	36	0
Ammoniacum	29	0	Cinnamon oil	5	0
Annatto-seed	46	0	Citronella oil	8	0
Apricot-kernels	28	0	Coca-leaves	120	0
Ataroba	1	1	Colocynth	28	0
Asafetida	496	25	Cubebs	20	0
Balsam tolu. (tin)	1	1	Cuttlefish-bone	61	1
Benzoin—			Dragon's-blood	6	2
Palembang	60	0	Elemi	20	0
Siam	12	0	Ergot	18	0
Sumatra	138	34	Eucalyptus oil	20	20
Buchu	15	3	Euphorbium	8	0
Calumba	96	40	Fennel-seed	115	10

	Offered	Sold		Offered	Sold
Galls	8	8	Rose oil(pots)	2	0
Gamboge	10	3	Salep	12	0
Guinea grains	5	0	Sandarac	4	0
Gum acacia	197	4	Sarsaparilla—		
Honey—			Grey Jam.	10	10
Cuban	11	0	Native Jam.	17	11
Jamaica	39	38	Scammony-root	52	0
St. Lucia	153	90	Seedlac	70	0
Ipecacuanha—			Senna and pods—		
Matto Grosso	3	0	Alexandrian	6	5
Jalap	8	0	Tinnevely	37	37
Kamala	4	0	Squill	47	42
Kino	3	3	Tamarinds	25	22
Kola	41	21	Tragacanth	41	41
Lime-juice	29	0	Turmeric	426	0
Lime oil	2	0	Wax (Bees)—		
Liquorice-root	20	0	Australian	7	0
Myrrh	8	0	East African	185	5
Nux vomica	187	0	East Indian	84	4
Olibanum	25	3	Jamaica	22	22
Orris	6	6	Madagascar	280	0
Papain	4	0	Nyasaland	2	2
Rhubarb (China)	33	24	St. Lucia	1	1

ALOE.—The Cape aloes was of irregular quality and sold at irregular prices, including darkish hard bright firsts, 37s. 6d. to 38s.; fair hard dullish seconds, 37s. 6d.; fair seconds, slightly soft, 35s. 6d. to 36s.; ordinary dull and soft seconds, 33s. 6d. to 35s.; and drossy ditto, 32s. 6d. per cwt. A new lot of 666 Curaçao gourds was offered, part consisting of good liver, the price of which did not transpire; two barrels broken and partly empty gourds sold at 27s. 6d.

A British Consular report on the trade of Curaçao has the following under "Aloes": The principal market is Hamburg. Prices have remained stationary and low during 1911. The crop was a small one on account of the severe drought, and the value of exports was as follows: Aruba, fl.94,893 (7,907l.); Bonaire, fl.10,522 (876l.); and Curaçao, fl.1,058 (88l.).

ASAFETIDA.—A considerable quantity from the Persian Gulf offered, and although only about 25 packages sold in the sale, a very fair quantity changed hands afterwards. There were few American orders, and prices generally were cheaper than the last public sale to the extent of about 20s. to 30s. per cwt. Fair alomdy partly blocky gum sold at 10l. 10s. to 10l., down to 8l. for heavier and more blocky. Medium and lower grades, part sandy, sold at from 6l. 10s. down to 60s. Eight boxes of part sandy block and partly loose sold without reserve at 95s.

BENZONIN rather firmer. The chief sales consisted of 20 cases of common to ordinary barks Sumatra thirds, which sold at from 5l. to 5l. 15s., and for 12 cases middling seconds with small to medium almonds, partly false-packed ends, 6l. 5s. was paid, rather bolder almonds fetching 6l. 10s. per cwt. Three cases good alomdy seconds, old fracture, sold at 8l. 10s. without reserve.

BUCHU.—Quiet. Good green round slightly stalky was limited at 6s. 6d., fair greenish but stalky at 6s. 3d., common yellow to yellowish and stalky 5s. 3d. to 5s. 8d.; ovals at from 1s. 11d. to 2s. 2d. for ordinary bronzy and stalky to green. Three bales sold without reserve, comprising one bale yellowish round at 5s. 5d. and two bales common bronzy longs with chopped stems at 1s. 3d.

Practically no arrivals in London have taken place during the previous fortnight. It is stated that the London stock in first-hands does not exceed 25 bales, of which about 15 are fair green leaf, and at the Cape there are very few bales in dealers' hands. By the Government regulations no further buchu can be collected until January, so that the present stocks will have to last about four months. The "Oil, Paint, and Drug Reporter" states that growers and operators at the Cape continue to withhold shipments of the new-crop long leaves, with which it had been hoped to relieve the shortage of the short leaves here. We understand, however, that the Government have not issued any permits to collect long leaves, and therefore practically nothing has been collected, it being the desire of the Government to preserve them this year. It is as well this fact should be stated, as American buyers are likely to be disappointed when the stocks of long leaves, alleged to be held up by Cape speculators, are not forthcoming.

CALUMBA.—Steady. Forty bags of common small to bold yellowish sorts sold at 14s. 6d. per cwt. without reserve; for 36 bags ordinary dark shrivelled sorts 12s. 6d. was wanted.

CARDAMOMS sold at firm but unaltered rates for the bold and extra bold sizes, medium and smalls being the turn cheaper. Ceylon-Mysore, extra bold long pale sold at 5s. 8d. to 6s.; medium to bold palish to pale, 5s. 2d. to 5s. 6d.; fair to good medium ditto, 4s. 10d. to 5s. 1d.; small and medium, 4s. 3d. to 4s. 7d.; brown split and pickings, 4s. to 4s. 3d.; bold pale, partly split, 5s. 6d.; medium and bold ditto, 5s. 3d. to 5s. 4d.; medium, 5s.; small, 4s. 2d.; Alleppy small to medium brown wormy, 3s. 9d. per lb. Seed, fair to good, 4s. 1d. to 4s. 4d.

The exports of cardamoms from Ceylon from January 1 to August 26 were 260,532 lb., against 453,295 lb. for the corresponding period of 1911, or 172,763 lb. less. The principal destinations have been (the figures in parentheses representing the 1911 figures): U.K., 112,871 lb. (200,087 lb.); Germany, 64,475 lb. (63,536 lb.); U.S.A., 24,654 lb. (56,066 lb.); India, 30,543 lb. (71,897 lb.); Norway and Sweden, 5,978 lb. (6,382 lb.).

CASCARA SAGRADA.—A lot of 62 bags fair thin bark imported in April 1911 sold without reserve at 36s. per cwt.; privately 40s. to 42s. 6d. is quoted for three-year-old.

COCA-LEAVES.—A lot of 120 bags ground Java was limited at 6d. per lb.; bids of from 4d. to 4½d. are to be submitted.

COLOCYNTH.—For ten cases fair pale mostly whole Turkey apple the limit had been raised to 9d.; broken apple was limited at 6d.; and 8 bales ordinary brownish pulped at 8d. per lb.

DRAGON'S-BLOOD.—No reboiled lump offered; two cases common bag-shaped lump sold without reserve at 5l. 7s. 6d. per cwt.; four cases reed were held at 8l. per cwt.

ERGOT.—For eleven bags of good boldish sound new crop (probably Russian) 4s. 3d. was wanted; four bags German, imperfectly cured, were held at 3s. 10d. to 4s. 2d. Privately Spanish has been sold at 5s. 6d. on the spot, and for November-December shipment business has been done in Russian at 3s. 7d. c.i.f.

EUCALYPTUS OIL.—A lot of 20 cases sold without reserve at from 1s. to 1s. 1d. for cloudy brown. The oil was guaranteed B.P. by analysis but not by colour. Privately 70 per cent. to 75 per cent. is quoted at 1s. 5d. per lb. on the spot.

FENNEL-SEED.—Ten bags sea- and country-damaged Persian sold without reserve at from 16s. 6d. to 17s. 6d. per cwt.

GALLS.—Eight bags partly sea-damaged Persian blue sold without reserve at 45s.

GAMBOGE.—Steady; seven cases of Siam pipe of practically all good bright orange fracture, part slightly blocky, were limited at 14l. 10s., a bid of 14l. being refused for part. Three cases of quality rather better than good pickings sold at 12l. 10s.

GUM ACACIA.—Twelve bales small to bold frosted reddish Aden sorts were held at 42s. 6d. per cwt.; 136 packages Australian offered; the finest lots, which consisted of small to bold good frosted gum, were limited at 47s. 6d., and fair glassy at 40s.; for a bag of part blocky 25s. was paid.

HONEY sold at rather cheaper rates. 153 cases St. Lucia offered, of which 90 cases sold at a reduction of about 1s. to 1s. 6d., fair liquid brown, partly setting, sell in at 25s. Of Jamacia, 39 packages offered and sold, including fair palish to pale set 31s. to 33s., fair pale brown setting 27s., and dark to middling setting brown liquid 25s. to 25s. 6d., and common setting brown at 23s.

IPECACUANHA.—Only three bales were offered, these being Matto Grosso, for which the limit had been raised to 8s. 9d. for fair partly plump root. Privately it is said this price has been paid. Minas, which was offering at 8s. 2d., is now quoted 8s. 6d., and for Cartagena, which is very scarce, the prohibitive price of 9s. is quoted. The Albanian, from Rio, has brought 22 bales to London—they are Matto Grosso kind.

JALAP.—Eight bags of small to bold part light and of Tampico character (12.70 per cent. analysis) were limited at 1s. 6d.

KINO.—Three cases of good bright ruby E.I. grain sold at from 1s. 4d. to 1s. 5d. per lb. without reserve. The

lot in question was imported in 1898, at which time there was extreme scarcity, the value then being about 15s. per lb.

KOLA.—A lot of 40 bags offered, of which 20 sold at 4d. per lb. for Ceylon quarters and halves part dark; a single bag in another interest sold at 5½d. for good St. Lucia.

NUX VOMICA.—A lot of 187 bags fair bright Madras seed was limited at 10s. per cwt. The parcel was afterwards sold by private treaty. Privately from 9s. to 9s. 6d. per cwt. c.i.f. is quoted for January-March shipment.

OLBANUM.—Three cases of fair medium drop sold at 47s. 6d. per cwt. subject.

ORRIS.—Six bags of fair leanish from Tripoli sold at 38s. per cwt.

RHUBARB.—Various reports are current as to floods in China having disturbed the rhubarb market, so much so that several sellers on the other side have defaulted their contracts or have asked for an extension of time in delivery. In auction prices were steady, the sales including four cases medium flat High-dried, with three-quarters very fair pinky fracture, one-quarter dark, 1s. 1d. The following sold without reserve: Two cases small round and trimming root Canton, part wormy and stalky, 9d.; two cases small and medium flat High-dried, very wormy, 9d.; five cases medium to bold flat dull-coated High-dried, rather wormy, half pinky and half dull to dark fracture, 11d.; five cases small to medium flat ditto, slightly wormy, half pinky, half dark to dull fracture, 11d.; six cases medium flat High-dried, rather wormy, with three-quarters fair pinky fracture, 10½d. to 10½d. For medium to bold round Shensi, slightly roughly trimmed, with three-quarters very fair pinky fracture, 3s. was wanted, a bid of 2s. 10d. being refused.

SARSAPARILLA.—Grey Jamaica was 2d. per lb. cheaper, ten bales of fair selling at 2s. and ordinary partly rough at 1s. 11d. Native Jamaica was also 1d. cheaper, eleven bales being disposed of at from 1s. to 1s. 1d. for fair red, 9d. to 10d. for ordinary, and 8½d. for ordinary dull red and yellow. The lower prices may be attributed to the fact that consumption is now at its lowest, and to the regular supplies which are coming along. Privately Lima is scarce, the value being from 1s. 11d. to 2s.

SCAMMONY-ROOT.—For 52 bales Levant 40s. was wanted, being too high to permit of business. The arrivals comprise 187 packages via Marseilles.

SENNA.—Quite unimportant supplies were offered; 27 bales Tinnevely sold at 1d. to 1½d. per lb. for common small yellowish and country-damaged. A bale of fine bold green Tinnevely sold without reserve at 9½d., and a bale of sea-damaged at 2½d. Pods sold at 1d. to 1½d. for partly sea-damaged.

SQUILL.—Several parcels, amounting to 42 bags, sold without reserve at 1½d. for fair yellowish, ¾d. for dark, and ¼d. for sugar-damaged. For five bags good dry white 3½d. was wanted.

TAMARINDS sold at steady prices, 22 packages of West Indian selling at 14s. per cwt. for juicy Barbados, and 11s. per cwt., subject, for fair St. Thomas, in bond.

VARIOUS DRUGS.—Ten cases of Japanese refined Camphor ¼-oz. tablets were bought in at 1s. 9d. Five cases of Cinnamon-leaf oil from Calcutta were limited at 2½d. per oz., and at which business has been done privately. A lot of 20 bags of fair slightly stalky Cubebe berries was limited at 9l., the broker having refused a pocket order of 8l. 10s. One case of good hand-pressed Dominican Lime oil was limited at 7s. 6d. per lb. Eight bales of fair rather small and partly blocky Somali Myrrh sorts were bought in at 55s. per cwt. A lot of 23 casks Wochan Soy was limited at 1s. 5d. per gal., duty paid. Turmeric continues dull of sale; fair Madras finger was limited at 24s. and Rangoon ditto at 19s. per cwt. Five cases of Chinese Wingkat Vermilion were bought in at 3s. per lb.

WAX (BEES').—Jamaica was 2s. 6d. to 5s. easier, 22 packages selling at the all-round price of 7l. 10s. for mostly good fair red and brown mixed, and for two cases of nice pale 7l. 17s. 6d. was paid. A box from St. Lucia sold at 7l. for darkish. Madagascar was steady but quiet, 7l. 2s. 6d. being wanted for fair block, and a few odd lots from Nyasaland sold at 6l. 12s. 6d. to 6l. 17s. 6d.

OUR GERMAN LETTER.

(Special Correspondence to the "C. & D.")

A Hygienic Museum in Dresden is now assured, as the town has agreed to present a site of 7,176 square yards, and from 1913 to contribute 7,500*l.* annually towards the expenses. The Saxon Government is to contribute at least 100,000*l.* towards the cost of erecting the buildings.

The German Association of Women Pharmacists now includes thirty-three members, of whom three are qualified, sixteen apprentices, seven assistants, five students, and two candidates. The number of women working as pharmacists in Germany is, however, much larger, as there are twenty-three in Baden, thirty-nine in Prussia, eighteen in Württemberg, and seventeen in Hesse. It is interesting to note that women as pharmacists have better prospects in small country places than in towns. In fifty districts having fewer than 5,000 inhabitants women pharmacists have up to the present been appointed.

Works Chemists.—The Association of German Chemists has published statistics regarding the number of chemists employed in 371 German chemical-works—viz., 2,569 in 1911 with university or high-school diplomas, and 322 technical chemists without. Of the 371, eighteen chemical-works each employ more than twenty chemists, these eighteen giving employment to 1,404 chemists and 115 technical chemists, so that only 1,165 chemists and 204 technical chemists were employed by the remaining 353. The total number of students of chemistry at the German universities and high-schools during last winter session was 2,682, of whom 422 were foreigners.

Illegible Prescriptions.—The President of the Berlin Police has addressed a letter to the President of the Berlin-Brandenburg Chamber of Doctors calling his attention to the fact that recently pharmacists have been unable to decipher badly written medical prescriptions, and the President of the local Society of Pharmacists has drawn the attention of the police to the matter. The Police President therefore requests the President of the Chamber to impress upon the doctors in the most emphatic manner the dangers resulting from this kind of prescribing, not only to their patients, but also to themselves. This is of interest owing to a recent trial in which the dispenser was exonerated from blame, although a mistake had been made in dispensing a badly written prescription.

Deutsche Apotheker-Verein.—The forty-first annual meeting was held in Nurnberg on September 4 and 5 under the presidency of Dr. Salzmann, of Berlin. The question of sick clubs was discussed, and in the petition to the Government one of the requests is to the effect that the rebate in the dispensing charges should be 5 per cent., and not 15 per cent. as the clubs are demanding. Attention was also drawn to the danger which is threatening the position of pharmacists if State Insurance should come into force before the Royal Decree relating to the sales of drugs has been revised, for according to the Insurance statute dispensing is no longer protected, as the sick clubs would be able to obtain supplies of all articles in trade and dispense them. A long discussion took place regarding the preliminary and final education of pharmacists, and members were unanimous in the opinion that the position of pharmacists will materially deteriorate if strict measures are not taken. With reference to the "Concordia Medica," a society which was formed some ten years ago for the wholesale vending of drugs, it was agreed that steps should be taken to prevent these sales. Much time was taken up in regard to the matter referred to in the next paragraph.

German Pharmacy.—Dr. A. Springfield, a State official and inspector of pharmacies, in a lengthy article on the effect of National Insurance on pharmacy, published in the organ of the Prussian medical officers of health, reviewed the history of Prussian pharmacy, dealt with its abuses, and made proposals for reform. Referring to the privilege principle under which pharmacies are carried on, it was pointed out that the usual sale-price of a privilege is eight times the annual turnover, exclusive of the value of stock, fittings, and other things. It is no uncommon thing to find that a pharmacy which has cost 37,500*l.* yields the owner a net profit of only 250*l.* a year, the rest of the profit having gone to pay interest on money borrowed to purchase the privilege. The 2,700 Prussian privileged pharmacies represent an aggregate indebtedness of 20,000,000*l.*, and have to pay annually about 1,000,000*l.* as interest. The result is "grave abuses." The pharmacist soon finds it difficult to make enough profit to pay the interest on the debt, and as his only salvation lies in selling the business, he resorts to various devices in order artificially to increase the turnover and profits, and as soon as these increase he

does all he can to find a purchaser. Thus more money is made now *by* the pharmacy than *in* the pharmacy. The new purchaser soon finds out the real state of affairs, and will begin the trick all over again. The fictitious value of pharmacies has been enhanced by compulsory sickness insurance, and Dr. Springfield states that on an average each person spends annually 1*s.* 6*d.* in the pharmacy in country districts and 5*s.* in the towns. For the members of sick clubs he places the cost of medicines supplied by the pharmacists at 1*s.* 9*d.* per head of the insured per annum. The extension of the insurance laws will mean a further increase in turnover to the pharmacists, but as the pharmacies are sold on the basis of their turnover, this increase will only go to swell the fictitious value of the privileged pharmacies, and nobody, not even the pharmacist, will derive any profit thereby. These statements have aroused the indignation of German pharmacists, and Dr. Salzmann, President of the Deutsche Apotheker-Verein, has replied to them in such a manner that Dr. Springfield proposes to take proceedings for libel against him and the editor of the "Apotheker Zeitung."

SCIENTIFIC PROGRESS.

Temperatures under this heading are on the Centigrade scale.

Java Coca.—De Jong ("Rec. Trav. Chim. Pays-Bas," 1912, 249) has examined the acids resulting from the decomposition of the mixed alkaloids obtained from Java coca (*Erythroxylon novogranatense*). This has been done before by Hesse, but De Jong now finds several acids present not hitherto identified, and which may assist in work on the alkaloids themselves which he is carrying further. The acids were obtained by decomposing the mixed alkaloids by strong hydrochloric acid on the water-bath. He has separated and identified the following acids: Alpha-truxillic, beta-truxillic, gamma-truxillic, benzoic, cinnamic, and allocinnamic, besides two others not yet identified which melt at 150° and 190°.

Cinchona Alkaloids.—Biddle, in a communication from the chemical laboratory of the University of California, states that when cinchonine and quinine are heated to 98° to 102° in the form of salts in aqueous solution they are converted into their poisonous isomers, cinchotoxine and quinotoxine, at a rate which depends on the dissociation constant of the acid. For example, with hydrochloride of the base, the conversion is almost *nil* after forty-eight hours, whereas with acetic or propionic acid complete conversion can take place in twenty-four hours. Analogous transformation can be induced by mere exposure to direct sunlight. It is suggested that a similar transformation in the body may account for reported cases of poisoning from quinine.

Illipe-nuts.—Dr. de Jong, chemist to the Java Agricultural Department, has examined recently an oil-seed called "Sanger," obtained from the Sambas district of Java. The seed contains 73 per cent. of kernel, and the latter yields 5.39 per cent. of fat, which has the following constants: Sp. gr. at 28°, 0.91; acid number, 7.2; saponification number, 187; iodine-value, 6.3 (? 63); and Reichert-Meissl value, 0.9. The high acid number in the sample examined is said to be due to the use of old kernels. The botanical origin of the seeds is unknown, but as the oil is very similar to that yielded by *bassia*-seeds, it is suggested that the kernels might well be marketed as "Illipe-nuts," especially as this name is no longer restricted to *bassia*-kernels in commerce. It is stated that about 1,000 piculs of the kernels could be collected in Sambas each year.

Adulterated Asafetida.—According to Sechler and Beeker ("Jour. de Pharm. et de Chim.," 1912, 404), asafetida is frequently adulterated with galbanum and ammoniacum. They give the following methods for detecting these adulterants: (1) *Hypobromite Test.*—A 10-per-cent. emulsion of the sample is made, and to 2 c.c. of this 5 c.c. of water is added, and a solution of sodium hypobromite is carefully poured on to the surface of the liquid; with pure asafetida an olive-green colour results; ammoniacum gives a cherry-red colour, which (when below 20 per cent. is present in the sample) is only to be noticed at the moment of contact. (2) *Sulphuric-acid Test.*—To 2 c.c. of the emulsion 30 drops of pure sulphuric acid is added. No marked colour results with pure asafetida, but in the presence of much galbanum a violet colour results. (3) *Refractive Index of the Essential Oils.*—The authors consider 1.4974 a typical value for oil of asafetida, 1.4765 for oil of ammoniacum, and 1.4840 for oil of galbanum. They suggest 1.4960 as the lowest permissible limit for oil of asafetida. [Compare *C. & D.*, 1912, 1, 269.—Ed.]

CHEMISTRY is no longer a "black art," but a refined science, and should be thoughtfully and reverently studied.

C



Memoranda for Correspondents.

All communications must be accompanied by the names and addresses of the writers, otherwise they cannot be dealt with. Queries by subscribers on dispensing, legal, and miscellaneous subjects connected with the business are replied to in these columns if they are considered to be of general interest. Letters submitted for publication (if suitable) should be written on one side of the paper only. Their publication in "The Chemist and Druggist" does not imply Editorial agreement with the opinions expressed.

British Pharmacopœia Ointments.

SIR,—The samples of paraffins from Mr. E. W. Lucas came safely to hand. During the latter part of April I made several samples of ointment according to the formulæ published in the *C. & D.* of February 17, with several different proportions of ingredients in each, and, after observation, have now pleasure in submitting a few remarks thereon.

Unguentum Paraffini.—I would suggest as suitable for summer requirements the following:

Hard paraffin	...	...	27 parts
Soft paraffin	...	...	90 parts
Beeswax	...	...	3 parts

and for winter:

Hard paraffin	...	...	27 parts
Soft paraffin	...	...	110 to 120 parts
Beeswax	...	...	3 parts

Unguentum Emolliens.—The suggested formula as published forms an admirable consistence with *Ung. Paraffini* as above for summer and winter. I would state that the temperature in Dunedin during the period of observation has been uniformly low, from 37° to 52°, and as our summer weather is frequently from 80° to 90°, the necessity of variance in amount of hard paraffin is obvious.

The proposed formulæ of Mr. Lucas make admirable bases, the manufacture being easy, and results permanently smooth. Two slight objections to the use of beeswax and lard occurred to me while making the experiments. Firstly, the difficulty of obtaining absolutely pure samples of beeswax and lard in ordinary commercial sources, and, secondly, the proper preparation and benzoating of lard. I have frequently observed a tendency on the part of some pharmacists to evade benzoating at all, and have known lard to be used in the form as received from the butcher without washing or other proper preparation. I make bold to mention this, because the pharmacist who prepares ointments in a skilful manner is seriously handicapped in business with his less honest competitors. A method of benzoating lard came under my notice some time ago, which struck me as much easier and more cleanly than the old method. It was by adding benzoic acid (in hot solution) to the melted lard and continuing the heat until the moisture was completely evaporated. The proportion of benzoic acid used was 1 part in 200 of lard, and the result was eminently satisfactory.

Ung. Acidi Carbolici.—I am pleased to notice the suggestion to exclude glycerin. This substance, and, added to it, the fact of some pharmacists being inclined to use acid, carbolic, liq., as more convenient than the crystals, has often been the cause of a crumbly product. Similar objection applies to all formulæ containing aqueous ingredients.

Ung. Ag. Rosæ.—This formula might well be completely altered. A soft ung. emolliens alb., perfumed with oil of rose, would be much more easy of manufacture, and produce a more regular result. I have never seen two similar results of manufacture from the official formulæ.

Ung. Belladonnæ and Ung. Conii.—I would suggest an equivalent of the extracts, softened with water, instead of the evaporation of the liquid extract and juice.

Ung. Zinci.—A regularly smooth product is obtained by first thoroughly rubbing the zinc oxide with a little almond oil, before admixture with the melted lard.

In conclusion, I must thank you for the opportunity of expression of opinion, and would state that I consider the medical practitioners and pharmacists of the British Empire are under a deep debt of gratitude to gentlemen such as Mr. Lucas and his colleagues for their skilfully able and successful efforts in amending weaknesses in the formulæ of the ointments of the British Pharmacopœia.

Yours respectfully,

Dunedin, N.Z., August 6.

ALEX. BAGLEY.

National Insurance Act Dispensing.

SIR,—Our medical friends are sometimes inclined to argue, in connection with dispensing under the National Insurance Act, that the doctor should continue to dispense because it is said that some pharmacists now prescribe even in cases where the doctor does not dispense. The answer to this argument is that it makes no difference under the National Insurance Act whether or no some pharmacists would be willing to prescribe as well as to dispense, because the opportunity for them to prescribe will be lacking. The Act allows for payment to the doctor who sees the patient and also for medicine supplied, but it makes no provision for any payment if the pharmacist prescribes, the patient always seeing the doctor first. Increasing effectiveness is being demanded to-day in every branch of the public service, and there can be little doubt that the most effective work will be done for patients if doctors prescribe and dispensing is left to pharmacists, who are specially fitted by their training and specialised knowledge for this work.

Yours truly,

London, N., September 16.

ROBERT W. LINDSEY.

The Rise of Drug-stores: Why?

SIR,—One is satisfied to learn from your correspondent "Felix" why he has left the ranks of private pharmacists to join the stores. There is little sentiment in business; it is each one for himself. It seems "Felix" did not attempt to risk any outlay of capital in business to improve his position before going over to the firm of cash chemists; nor did he attempt to improve the qualified assistants' position at his own risk. He may, therefore, have some consideration for the pharmacists in business who did not find him all he desired. How strange as one recollects upon opening the daily papers some little time back we read in the page advertisements "Chemists' usual prices" compared with "Cash chemists' prices." It was the private chemist who made exorbitant profits; now the boot is on the other foot. It is the stores who can afford to pay higher salaries for shorter hours. The private chemists may be standing still, which is accounted for, as "Felix" states, by qualified assistants leaving our ranks. Not only, however, is it the assistants which strengthen the stores, but principals in business who sell their old-established businesses to the stores, at the same time transferring their services as managers. On the other hand, we hear of men leaving cash-store firms to commence business on their own account. The ranks in pharmacy are undergoing rapid changes. Instead of there being two qualified men in the same business, they may still be more distributed. By adjustment of private pharmacists working together pharmacy may be made more remunerative, and we may find there is no necessity to pay high premiums and high official salaries to bring about the desired end.

Yours truly,

Hastings.

A. E. BOLSHAW.

SIR,—"Felix" is living in a fool's paradise. He congratulates himself on having found a situation which will give scope for his abilities. If these lie in the direction of the billiard-table, the club, or the football field he may be right; but he makes in his letter assertions which I doubt the accuracy of. My own opinion is that pharmacy is not going to the dogs. "Felix" makes a parade of his anxiety to secure more customers for his new masters. Laudable object; and no doubt he will get his reward all in due time. Talents prostituted to mammon generally get their reward in due time. According to "Felix," "All the cream of pharmacy is going to the stores." He asks, "Do you blame them?" Well, if they were, I for one should blame them, but he is mistaken; he imagines himself cream whereas he is really only the buttermilk. The backboneless individual who because he

wants to be looked up to becomes a manager. Is his ambition simply to be looked up to? Shades of Galen! The stores rate of pay, as far as I can gather, is about 150*l.* to 200*l.* per annum. Fancy a pharmacist who cannot make that amount and be his own master! Labour is like water; it finds its own level. The store level is, say, 175*l.* per annum. There are hundreds of pharmacists to-day ready and willing to pay 250*l.* to 500*l.* per annum to qualified men with brains and the ability to use them. Poor "Felix"! Because you could not make good in a pharmacy you retire to a store and then point out to us your superior wisdom. Was it not the easy job you were seeking all the time?

Yours,

INFELIX. (51/18.)

Optical Classes for Birmingham.

SIR,—The lack of facilities in Birmingham for obtaining the necessary instruction for a diploma in optics and sight-testing having often been remarked upon by pharmacists in the district desirous of studying for the S.M.C. or B.O.A. examinations, I have, with the approval and through the influence of the Midland Pharmaceutical Association and the Chemist-Opticians' Society, been able to have an interview with Dr. Sumpner, Principal of the Birmingham Municipal Technical Schools, with a view to arranging a course of instruction for one of the examinations at the Central School in Suffolk Street. On account of lack of room, it is impossible to arrange evening classes until extensions to present premises are available; but there will be no difficulty in arranging a course to be held two afternoons per week—say, Wednesday and Tuesday or Friday afternoons, from 2.30 P.M. to 5 P.M. The fee for the two afternoons per week for the session of forty weeks will be about 25*s.* Will all those interested please let me have their names and addresses by an early post, so that I may arrange a meeting at which we can decide on the most suitable days for the class and which of the examinations the syllabus shall cover?

Yours faithfully,

323 Coventry Road, Birmingham.

H. O. LLOYD.

Subscribers' Symposium.

For questions, answers, incidents, and interchange of opinions among "C. & D." readers.

Appreciations.

"I find the drug-cultivation papers in this week's *C. & D.* fascinatingly interesting," writes a distinguished chemist (48/53).

"I should just like to say in my experience of nearly fifty years I have found the *C. & D.* most valuable, as well as most interesting. Quite an increased income can be made by perusing it regularly."—(49/7.)

Hungarian Water.

We had an order to-day for

"Hungarian water	1 oz.
Oil of amber	1 oz.

Mix, and use for whooping-cough."

Can any of your subscribers enlighten us as to what the first article represents?—*Rytol* (51/38).

[Spirit of rosemary is usually given for Hungary water nowadays. See "Pharmaceutical Formulas," p. 206.—EDITOR, *C. & D.*]

Macassar Oil.

In reference to note on Macassar oil this week, it may be interesting to quote Byron, who in "Don Juan" describes Donna Inez thus:

"In virtues nothing earthly could surpass her
Save thine 'incomparable oil,' Macassar!"

In a footnote he says:

See the advertisement for the "Description des vertus incomparables de l'Huile de Macassar." I should imagine that Byron knew no other oil but Rowland's.—*A. E. B.* (48/48).

British East Africa.

A Chemist (40/30) in this new and progressing part of the British Empire writes: "The country seems to be going ahead very rapidly, people are coming in from the south as well as from Europe, and, of course, it is really the money coming into the country which is keeping things

going; but I suppose that is always necessary in a new country until the embryo stage of its development is over. Coffee is being grown very largely close to Nairobi, and it is expected that B.E.A. will be a big producer of coffee shortly. Rubber is grown largely in the country, and some cotton near the coast. Frangipani grows wild down by the Tana river. *Eucalyptus citriodora*, wattle, cedar, mulugo, and teak are some of the trees, but most wonderful of all, I think, is the amount of game and wild animals. One need go only about half a mile out of Nairobi to see hundreds of zebra, kungoni, gazelle, ostrich, and buck of all kinds, while two or three stations down the line is the hunting-ground for lion. Leopards haunt the trees round Nairobi, and baboons are to be found all round the place, while the hyenas come right into town at night time scavenging, and one can hear them howling almost any night. Last year I travelled 2,000 miles in the train through Rhodesia to the Congo, and hardly saw so much as a bird, while in the early part of this year I went right across the lake to Uganda, and saw very little of anything after we were out of Nairobi. Of course, the wide Athi Plains give one ample opportunity to see all the game, as they come up quite close to the train, and the lion is often seen by passengers going and coming. Giraffe, elephant, and rhino abound not so far off either, but one has to have a few weeks' 'safari' to hunt these animals properly. The natives here are a very poor class compared with the south, and although there are as many natives in B.E.A. as are in the South African Union, it is most difficult for employers of labour to obtain boys in sufficient number. Fortunately their pay is small, for it takes about six of the boys here to do the work of one good Zulu or Basuto boy."

Legal Queries.

Consult "The Chemists' and Druggists' Diary," 1912, pp. 435 to 454, where most legal difficulties are anticipated, before writing about your difficulty

Rusticus (48/36).—Considering that the High Court of Justice ruled that a chemist and druggist may call himself a "Veterinary Chemist," we see no reason why "Dental Chemist" should not also be used so long as it is not employed in a manner to imply that the user is registered under the Dentists Act.

R. B. (39/18).—You cannot be prevented using your own name to describe your own article, especially since it has been used by your firm for two generations. You must take care, however, that your articles are not a colourable imitation of another person's of the same name, and that yours are not sold when his are asked for.

Ferrum (47/36) asks if tablets bearing a label with the words for making thin people stout or fat, and an illustration having a thin figure and also a plump, well-proportioned person on it, would be liable to medicine stamp-duty, provided no reference was made to any disease and no source of formula given. [No; obesity is regarded as a disease, but fatness is not.]

Midlands (44/38).—Your letter on repetition of prescriptions came too late for our last issue, but you are wrong on the law as to the dispensing of poisons. "Prescription" is not mentioned in Section 17 of the Pharmacy Act, 1868, and it is not necessary in order that poisons may be dispensed under the terms of that section for a physician's prescription to be presented.

New Cross (50/60) asks how the following liniment stands as regards the poisonous substances' regulations:

Ol. sinap. exp.	3iv.
Liq. ammoniac	3iv.
Spt. terebinthinæ	3iv.—M.

[It is outside the regulations because it contains less than 5 per cent. by weight of free ammonia.]

Irish (48/50) having unsuccessfully appealed to the Commissioners against his assessment for income-tax, wishes to know whether, in default of payment, his goods are immediately liable to a seizure, or whether he must first be brought before a County Court judge? [A distress for unpaid income-tax may be levied on subscriber's goods under the warrant of the Commissioners.]

B. M. (49/7) has occupied his present house for about nine years, during which period he has been assessed to water-rate upon a greater amount than to district rates. He has frequently complained to the water company, who at last acknowledge their mistake and offer to refund to subscriber the amount by which he has been overcharged

during the past two years. Can subscriber compel the company to pay him the full sum overcharged during the past nine years? [We advise subscriber to accept the sum offered by the company. The amounts overpaid by subscriber have been paid voluntarily, even if under protest, and in our opinion he could not successfully sue for their return.]

Mahos (48/56) is lessee of a house and shop, and shares a yard at the rear with the occupier of the adjoining premises, which belong to subscriber's landlord. The adjoining premises are shortly becoming vacant, and subscriber wishes to take a lease of them. Will a letter from the landlord be sufficient, or will a formal lease be necessary? The outgoing tenant threatens to cut down some fruit-trees, planted by her during her tenancy, unless they are purchased from her. Is she within her rights? [If the proposed lease is for three years or less, and at a rent amounting to two-thirds at least of the full value of the premises, a letter from the landlord will suffice; otherwise the lease should be by deed. The outgoing tenant is not entitled to cut down or remove the fruit-trees, nor is she entitled to any compensation for them, except under a special agreement with the landlord. The landlord, and not subscriber, is the proper person to take steps in the matter.]

Usk (48/35) purchased a chemist's business, and got the usual receipt from the seller that he would settle all liabilities incurred up to that time. In the shop is a National cash-register. "Usk" finds that this was on the hire system, and there is a balance due on this of 30%. The company now threaten to remove the till if "Usk" does not pay the 30% due. The seller of the business is abroad. Is "Usk" liable? [The terms upon which the company lend their registers on the hire system show that the registers are their property until the payments are complete. The contract in this case was between the company and the seller of the business, so that "Usk" is not a party to it, but apparently they are willing that he should retain the register on payment of the instalments that are due. If "Usk" agrees, we presume a new contract will be made by the company with him. It is common knowledge in the trade that these registers are obtained on the hire-purchase system, and in buying businesses, if a register is taken over, the purchaser should get full particulars from the seller of the business, and also from the company.]

Miscellaneous Inquiries.

We do not as a rule repeat information which has been given in this section during the past twelve months, as it occupies space which can be more profitably utilised for other information. In such cases the numbers are mentioned, and if querists cannot refer to these they may obtain the numbers from the "C. & D." Office at the published prices, usually 6d.

We do not undertake to analyse and report upon proprietary articles, and when samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how.

Cough (45/38).—COUGH AND COLD MIXTURE FOR CHILDREN. The P.J.F. formula No. 080 is printed as follows:

Honey	...	...	7 lb.
Compound spirit of camphor	...	36	fl. oz.
Spirit of nitrous ether	...	36	fl. oz.
Syrup of squill	...	45	fl. oz.
Vinegar of ipecacuanha	...	13½	fl. oz.
Diluted sulphuric acid	...	9	fl. oz.
Water	...	6	fl. oz.

A similar formula for adults is *weaker*, as it prescribes 60 fl. oz. of water with the same quantities of the other ingredients.

Zero (37/24).—F. Mollwo Perkin's "Qualitative Chemical Analysis, Organic and Inorganic" (Longmans, 4s. 6d.), and C. H. Hampshire's "Volumetric Analysis for Students of Pharmaceutical and General Chemistry" (Churchill, 3s. 6d. net) will no doubt fit your requirements. It is not usual for a text-book to cover both quantitative and qualitative analysis.

J. N. K. (Smyrna) (40/35).—SULPHURATED LIME SOLUTION. This solution ought to be of a pale yellow colour. If the stew-pan in which you boiled it is made of iron a certain quantity of sulphide of iron would be formed, and this would make the solution darker than it ought to be. You had better make it in an enamelled pan. In no case ought the solution to be colourless, unless indeed the preparation were very dilute.

N. (Belfast) (40/52).—DEPOSIT IN EASTON'S SYRUP.—This deposit is due to the crystallisation of acid quinine phos-

phate, the quantity of water being insufficient to keep it in solution when the usual amount of sugar is used, but in old specimens of the syrup the chalk-like deposit is amorphous ferric phosphate. If you reduce the quantity of sugar you will find that the syrup keeps without depositing.

A. S. P. (Birmingham) (41/61).—FURNITURE-POLISH.—We suppose you mean a polish that can be applied with a brush and that will dry leaving a bright "polished" surface. Celluloid does not seem to us to be an ideal base on account of its inflammability, but a solution of that substance in acetone or amyl acetate would fulfil the conditions which you seem to require. It should be about 1 oz. to the gal.

J. M. (48/49).—These columns are not intended to encourage students to avoid difficulties by passing them on to us. You should work out for yourself "the chemical equation of what takes place when tartaric acid and sodium bicarbonate are mixed in a seltzogene."

M.P.S.I. (42/7) writes: "A study of the very able article in the *C. & D. Diary*, 1910, on DENTISTRY has imparted the desire to go more deeply into this very interesting subject. I have since read Barrett's 'Dental Surgery,' and would feel obliged for your kindness in indicating the best works to procure for my instruction." ["M.P.S.I." should first study Tomes's "Dental Anatomy," in which he will find a complete description of the dental tissues, and also tooth-development, etc. For dental surgery, Tomes's "Dental Surgery" or Colyer's "Injuries and Diseases of the Teeth" may be consulted. Two excellent books on particular subjects are Coleman's "Extraction of Teeth" and Ottolengue's "Method of Filling Teeth," the latter especially being an extremely useful book. In dental mechanics there is a wide range of books, but Wilson's "Dental Mechanics," Tomes's "Prosthetic Dentistry," and Essig's "Text-books of Prosthetic Dentistry" cover this subject. With these "M.P.S.I." should have sufficient to digest, but he should remember that, as in a great many other things, practice is the only thing which makes perfect, and especially is this so in dentistry.]

A. W. S. (47/4).—THE METHODS OF KEEPING LEECHES were fully dealt with in our issue of June 29, index folio 970.

S. A. S. (45/14).—FOR VIOLIN-RESIN look up THE CHEMIST AND DRUGGIST for April 27, index folio 630.

S. R. C. (43/12).—CINNAMATED QUININE.—A formula for a liquid preparation was given in the *C. & D.* for January 13, 1912, index folio 70.

O. A. (50/29).—DRY-SHAMPOO FOR A DOG.—Try the following:

Dried sodium carbonate	...	...	3j.
Powdered borax	...	...	3iv.
Ground rice	...	...	3viii.
Camphorated chalk	...	...	3j.

Mix these well together, sprinkling over the powder a drachm of eucalyptus oil; finally sift.

For a rough-haired fox terrier, or any other dog, the powder is to be well dredged into the hair from a pepper-caster, rubbing it freely in, but without irritating the skin. A few hours later, or next morning, brush the coat with a dandy-brush.

J. E. C. (47/23).—If you add to the cost and carriage of the carbolic acid 25 per cent. profit, that will be quite fair to the farmer who is buying it.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," Sept. 15, 1862.

Cutting Prices.

The late Mr. Shoolbred, who established the largest retail draper and hosier's business in London, was content with 7½ per cent. on his returns: but then those returns amounted in one day to the whole return of a first-class chemist and druggist for one year. The system of cutting or low prices introduced by chemists and druggists will never lead, in a general sense, to an increased demand for, or consumption of, physic. People never deny themselves the questionable luxury of medicine, when they find that they absolutely require it; nor will they be induced to indulge gluttonously therein, simply because they find it cheap. With articles of food, raiment, household utility, or personal ornament, low charges are beneficial, both to the consumers and vendors, by enabling the former to gratify all their wants, luxuries, or otherwise, upon a more extensive scale; and the latter to live and thrive upon small profits, by reason of the greatly increased demand for their articles, and consequently correspondingly increased returns.

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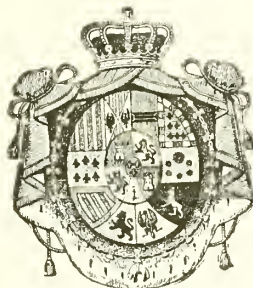
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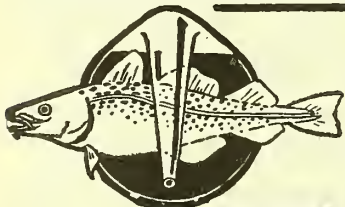
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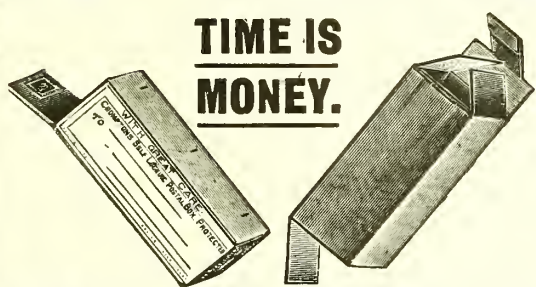
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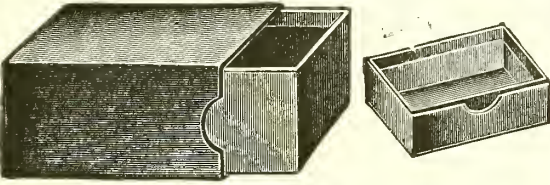
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 " Sulph Aromat., B.P., 5 lbs. @ 3/8 lb.
 Adeps Benz., B.P., 28 lbs. @ 8½d. lb.; 7 lbs. @ 9½d. lb.
 Ammon. Brom., P.B., 1 cwt. @ 2/1 lb.; 7 lbs. @ 2/2½d. lb.
 Ammon. Carb. lump., 3 cwt. @ 4½d. lb.; 28 lbs. @ 5½d. lb.; 7 lbs. @ 5½d. lb.; powder, 4d. lb. extra.
 Ammon. Chlor., 99% pulv., 1 cwt. @ 33/- cwt.; 7 lbs. @ 4d. lb.; Batteries, 4/- cwt. extra.
 Aniseed, English ground. 1 cwt. @ 44/- cwt.; 7 lbs. @ 5½d. lb.
 Apioi, 1 lb. @ 35/- lb.
 *Aqua. Anethi Conc. 1-40, 1 lb. @ 2/11 lb.
 " Anisi Conc. 1-40, 1 lb. @ 3/1 lb.
 " Cinnam. Conc. 1-40, 1 lb. @ 3/4 lb.
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 " Samb. Conc., 1-40, 1 lb @ 6/1 lb.
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 *Ext. Glycyrrh. Liq. B.P., 6 lbs. @ 1/4½ lb.
 *Ext. Hamamelis, Liq., P.B., 5 lbs. @ 3/5 lb.
 *Ext. Ipecac. Liq., P.B., 5 lbs. @ 13/9 lb.; 1 lb. @ 14/9 lb.
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 Ext. Quassia, Solid, 7 lbs. @ 6/- lb.; 1 @ 6/4 lb.
 Ext. Sarsæ Co. Solid, 7 lbs. @ 4/- lb.; 1 lb. @ 4/6 lb.
Ferri Ammon. Cit., P.B., 28 lbs. @ 1/6½ lb.; 7 lbs. @ 1/7½ lb.
 Ferri et Quinina Cit., P.B., 500 ozs. @ 4½d. oz.; 100 ozs. @ 4½d. oz.; 25 ozs. @ 4½d. oz.
 *Inf. Aurant. Conc., 1 to 7, 6 lbs. @ 1/3 lb.
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 " Gentianæ Conc., 1 to 7, 6 lbs. @ 1/- lb.
 " Quassia Conc., 1 to 7, 6 lbs. @ 9d. lb.
 " Rhei Conc., 1 to 7, 6 lbs. @ 1/5 lb.
 " Rosæ Acid. Conc., 1 to 7, 6 lbs. @ 1/8 lb.
 " Senegæ Conc., 1 to 7, 6 lbs. @ 2/2 lb.
 " Valerian Conc., 1 to 7, 6 lbs. @ 1/3 lb.
Lin. Camph. P.B., 40 lbs. @ 10d. lb.; 9 lbs. @ 11d. lb.
 *Liq. Hamamelidis, B.P., 6 lbs. @ 1/1 lb.
 Morphine Diacetyl., 4 oz. @ 15/10 oz.; 1 oz. @ 16/4 oz.; Hydrochlor., 6d. per oz. less.
 Myrrh. Gum, English Ground, 28 lbs. @ 11d. lb.; 7 lbs. @ 1/1 lb.
Naphthalene, Candles or Balls, 1 cwt. @ 12/6 cwt.; 56 lbs. @ 14/6 cwt.; 28 lbs. @ 16/- cwt.
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 Ol. Anethi Ang. B.P., 1 lb. @ 12/- lb.
 Ol. Anisi, E.I., 66 lbs. @ 6/1 lb.; 16½ lbs. @ 6/4 lb.; 1 lb. @ 6/11 lb.
 Ol. Aurant, 12 lbs. @ 8/- lb.; 1 lb. @ 9/- lb.; not guaranteed absolutely pure.
 Ol. Cajuput, B.P., 21½ oz. Bots. @ 2/7 lb.
 Ol. Caryoph. Ang., B.P., 9 lbs. @ 4/9 lb.; 4½ lbs. @ 4/11 lb.
 Ol. Menth. Pip. Hotchkiss original bots., 21 oz. @ 16/6 lb.; 6 bots. @ 16/1 lb.; 18 bots. @ 15/3 lb.
 Ol. Olivæ P.B., good yellow, guaranteed pure, 45 gall. Barrels @ 4/8 gall.; 2-gall. tins @ 5/3 gall.; fine cream, 9-lb. tins @ 7/2 each.
 Ol. Ricini Alb. Opt. Medicinal, 176 lbs. @ 40/6 cwt.; 88 lbs. @ 42/- cwt.; 44 lbs. @ 44/- cwt.; 9 lbs. @ 6d. lb.; for export, 1 cwt. drums recommended, 9/6 each extra.
 Ol. Santal Flav. Ang. B.P., 5 lbs. @ 11/2; 1 lb. @ 11/6 lb.
Phenacetin, P.B., pulv., 1 cwt. @ 2/8 lb.; 7 lbs. @ 2/10 lb.; 1 lb. @ 3/- lb.
 Phenazone, P.B., 7 lbs. @ 6/11 lb.; 1 lb. @ 7/6 lb.
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 Chloral Hydras Cryst. B.P., 7 lbs. @ 3/1 lb.; 1 lb. @ 3/6 lb.
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 *Chloroform, pure B.P., 12 8-lbs. @ 1/3½d. lb.; 8 lbs. @ 1/4½ lb.; 6 1-lb. bots. @ 1/6½ lb.
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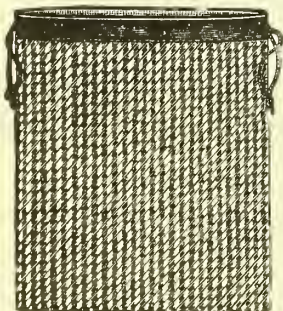
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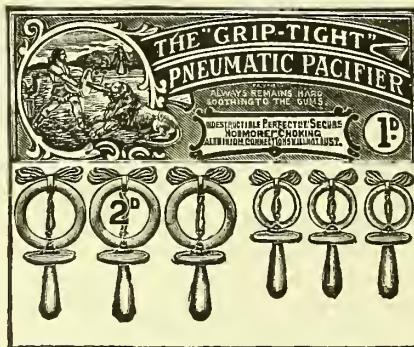
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Customers can have their names,
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LOW PRICES. BIG DISCOUNT.
Sole Manufacturers:—

The Fulham Pottery & Cheavin Filter Co., Ltd. FULHAM
LONDON, S.W.

HOT-WATER BOTTLES

Are articles in regard to which some Chemists have had troublesome experiences in the past.
You will be free of all troubles and give your customers the utmost satisfaction if you buy

THE "EMPIRE" BRAND

Made in Two Weights, but One Quality only—the Best.

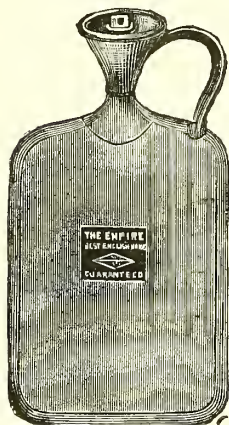


Fig. 957.—Side Handle.

Guaranteed for 2 years.

Top or side handle	SIZES	6×8	6×10	6×12	8×10	8×12	8×14	10×12	10×14	12×14
Heavy weight	each	3 0	3 4	3 9	4 0	4 4	4 9	5 0	5 4	6 6
Light	"	2 9	3 0	3 5	3 6	3 10	4 6	4 8	5 0	6 1
Covers, scarlet or grey plush,	"	0 8	0 8	0 10	0 10	0 11	0 11	0 11	1 0	1 2
" " " felt	"	0 5	0 5	0 6	0 6	0 7	0 7	0 8	0 10	1 0

N.B.—The metal collar in both heavy and light Bottles is **vulcanized into the rubber neck**, thus making it practically one solid piece and doing away with all possibility of leakage.

For orders of **two dozen** bottles assorted we will put tablet with customer's name on free of charge. Each Bottle in a strong paper bag with directions for using.

5% discount allowed for prompt cash off above prices. Carriage paid on Orders of £2 and upwards to any town in the United Kingdom.

We are the right House for Catheters, Enemas, Elastic Hosiery, Hot Water Bottles, Injection Syringes, Pessaries, Sponge Bags, Trusses, Water Beds, Water and Air Cushions, Waterproof Sheeting, and every description of Rubber Goods.

ILLUSTRATED CATALOGUE, POST FREE. OUR GOODS ARE RIGHT.
MONEY BACK IF NOT SATISFIED.

BURGE, WARREN & RIDGLEY, LTD.,
91 & 92 GREAT SAFFRON HILL, LONDON, E.C.

The Original and only Genuine

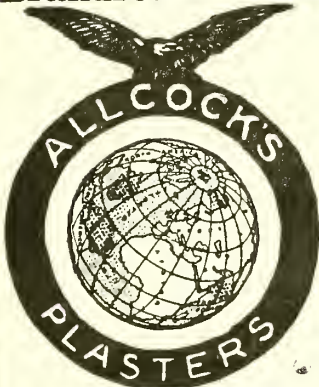
Allcock's

POROUS PLASTERS

A REMEDY OF 60 YEARS' STANDING.

Allcock's Plasters
Allcock's Corn and
Bunion Plasters
Brandreth's Pills

The
Three
Reliables.



"Sold all round the World."

A HANDSOME
SHOWCARD
will be sent
free of cost
and post paid
on application.

ALLCOCK
MANUFACTURING
COMPANY

22 Hamilton Sq.,
Birkenhead.

BOTTLES:

:: YORKSHIRE MAKE. ::



DISPENSING as illustrated. Plain
or Graduated

1½ & 2 oz.	3 & 4 oz.	6 & 8 oz.	10 oz.	12 oz.
6/9	7/-	8/-	12/-	13/6
16 oz.	20 oz.			
18/-	19/6			

per gross.

GREEN PANELLED (three sides)
1/- per gross extra to above prices.

GREEN PANELLED HEAVY
(for Cough Mixtures)

2½ oz. 7/6; 5 oz. 9/- per gross.

POISON. Oval Ribbed, Pale Green (for Ammonia)

3 & 4 oz.	6 & 8 oz.	10 oz.	12 oz.	16 oz.	20 oz.
9/-	10/-	13/-	14/6	18/6	21/-

per gross.

TERMS: NET CASH 7 DAYS. CRATES 1/- EACH.

Carriage paid up to 100 miles ex. Leeds (small extra charge beyond that distance).

THOMAS SWALES,
24 BUTTS COURT, LEEDS.

FOR PRICES OF
Surgical Dressings

APPLY TO

NEW, CHARFORD MILLS, BIRMINGHAM.

W. G. TAYLOR,

A Branch of Southall Bros. & Barclay, Ltd.

(Established 60 Years.)

WHOLESALE ONLY.

Manufacturer of
**LINTS, ABSORBENT
COTTONS & GAUZES,** at
the MILLS, BIRMINGHAM
and BROMSGROVE.



Dr. BOW'S LINIMENT, LTD.

On P.A.T.A. List.

**DR. BOW'S
LINIMENT.**

PREPARED BY HIS GRANDSON.



Minimum Retail Price:
2/6 & 1/1 $\frac{1}{2}$

The Gothic window (shown above) and also the name "Dr. BOW'S LINIMENT" are registered Trade Marks and appear on every bottle, and anyone using the name or any similar name or any liniment or similar preparation not prepared by the Company is liable to be proceeded against.

The above Label in blue appears on the outside wrapping of every bottle.

Dr. BOW'S LINIMENT, Limited, 8 Union Marine Buildings, LIVERPOOL.
7 South Gray Street, EDINBURGH.

A. DE ST. DALMAS & CO

Contractors to
His Majesty's Government.

LEICESTER.

(Established 1823.)

— MANUFACTURERS OF —

MEDICAL PLASTERS

Spread Plasters. Adhesive, Belladonna, Soap Cerate, Roborans, Fleshcolour Adhesive, &c.

Hospital Strapping. On Holland, Pure Stout Calico, &c.

Porous Plasters. All kinds. On Cotton Cloth, Red Felt, White Kid, &c.

Rubber Adhesive Plaster. On Cotton Cloth or Holland—In Tins or on Spools.

Court Plasters, Toothache Plasters, Corn and Bunion Plasters, Mustard Leaves, &c.

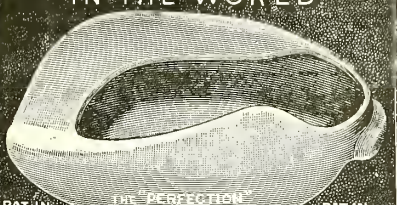
SURGICAL BANDAGES

Waterdressing, Fastedge, Calico, and Flannel Bandages, Elastic Web,
Crepe Velpeau, and Plaster of Paris Bandages.

— **THE LEICESTER "VARICO" LEG BANDAGE.** —
TRADE MARK.

MEINECKE & COMPANY
PERFECTION
COMBINED
BED AND DOUCHE PAN

THE MOST COMFORTABLE
AND SANITARY BED PAN
IN THE WORLD



PAT. IN GERMANY TWO U.S. PATENTS JUNE 5, 1900. PAT. IN GREAT BRITAIN

MADE BY
GRIMWADES LTD.
STOKE ON TRENT
ENGLAND

This improved Pan is comfortable, because it is "anatomically correct in shape"—it is shaped to fit the body. It causes no uncomfortable pressure against the spine as the old style Bed Pans do.

The "Perfection" Pan has no spout, but instead has a wide open space at one end from which the contents are emptied. It has no corners or crevices in which matter can lodge, and because of its open construction it may be readily flushed out. It is so constructed that almost the entire interior is open to view.

It is a combined Bed and Douche Pan—intended to be used for both purposes.

The "Perfection" Bed and Douche Pan has come into world-wide use. It has been adopted by more than 2000 Hospitals throughout the United States, including the Hospitals of the U. S. Army and the U. S. Navy. Physicians and Trained Nurses everywhere recommend it to their patients.

Made Only in Porcelain

RETAIL PRICES	
No. 1 Standard Size.....	8/6
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USED IN LEADING BRITISH HOSPITALS

Grimwades Limited Accept Orders
Only from Wholesalers

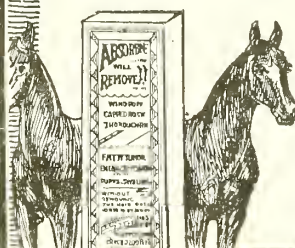
Retail Dealers Supplied by all the
Leading Wholesale Chemists and
Druggists' Sundries Houses.

PAT'D IN GREAT BRITAIN
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APPEAL TO THOSE WHO CAN SPEND!

— ABSORBINE

has been advertised year in and year out in the principal horse, farm, and open-air Journals and has earned an enviable reputation for its excellence as a liniment for removing puffs and tumors etc., without blistering and without pain.



8/3 bottle Retail
75/- dozen.

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PARTICULARS
OF OUR MOST
INTERESTING
SALES SCHEME.

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4 Old Swan Lane, E.C.

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VETERINARY SPECIALITIES

"VETUNG."—A powerful Antiseptic Ointment. Emollient, Healing, Deodorant

ANTHELMINTIC POWDER.—Supersedes Santonin preps.

CONDITION POWDER.—Nutrient, Tonic-Laxative, Diuretic. Rectifies deficient bone growth.

GAME AND POULTRY MEDICINES.

A wide range of really high-class products
— EXTENSIVELY ADVERTISED. —

The above specialities yield a profit of 33% to the retailer.
Stock them. They will be asked for.

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CHLORIDE OF LIME

In Packets, $\frac{1}{2}$ lb., $\frac{1}{4}$ lb., and 1 lb.; also in Tins, $\frac{1}{2}$ lb., and upwards.



TRADE MARK.

THE UNITED ALKALI CO.
LIMITED,

Greenbank Works, ST. HELENS, LANCs.

RENDELL'S

SOLUBLE QUININE PESSARIES.



THE WORLD-WIDE REPUTATION that these Pessaries have obtained since their invention by W. J. Rendell in 1885 has induced unscrupulous persons to place upon the market worthless and injurious compounds, with colourable imitations of W. J. Rendell's labels. To distinguish the genuine Pessaries from these fraudulent concoctions, see that the Registered Trade Mark and Number, in **RED INK**, are upon each box thus:

Registered
Trade Mark, 
without which
none are genuine.
No. 182,688.

W. J. Rendell
No. 182,688.

Registered also in Australia, India, The Cape, The Argentine, Germany, &c.

IMPORTANT NOTICE AND CAUTION.

Several injunctions in the High Court of Justice having already been obtained (reports of which have appeared in "THE CHEMIST AND DRUGGIST"), W. J. RENDELL'S SOLICITORS are instructed to take proceedings against all persons (Makers or Vendors) fraudulently using the name of "W. J. RENDELL," "RENDELL," or any colourable imitation thereof in connection with Pessaries NOT manufactured by

W. J. RENDELL,

INVENTOR AND SOLE MAKER,

15 CHADWELL STREET, CLERKENWELL, LONDON, E.C.



POND'S SPECIALITIES FOR BUNIONS AND TIRED FEET

PROFITABLE SELLING LINES.

Pond's Toe-spring for Bunions, 30/- doz. Retail, 3/9 each
Pond's Supports for Weak Feet, 36/- ,, ,, 4/9 & 5/6 pair

POND'S "IDEAL" SUPPORT,

36 Church Street,
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Aug. 15th, 1904.

Best Tempered English Steel. PATENTED.
PREVENT FLAT FEET.

In every case our customers speak very highly of your supports. They always give satisfaction, and need to be more widely known.

Yours truly,
S. C. ROSCOE,
Central Boot Stores

SUPPORT
FOR
WEAK
FEET

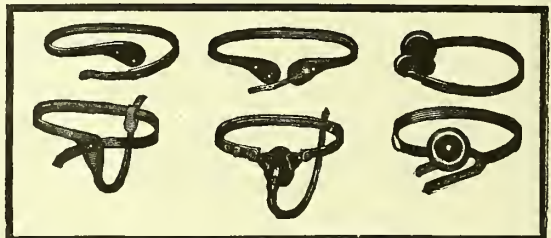
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EVERY ARTICLE Guaranteed or Money Back.

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BEST QUALITY.

ACTUAL MAKERS.
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MADE ON THE PREMISES.

Specials Despatched in 24 hours.

Illustrated Price List free.

Bailey's Circular Trusses	...	23/-	Double 37/-
" 2nd quality	...	16/9	31/6
" Special "Marone," with Customer's Name in Gold	...	26/-	43/-
Correspondence Invited.			Best Shipping Terms.

38 Oxford St., LONDON, W.

"JUGGLER"
BLACK FOR LEATHER



FOR DYEING TAN BOOTS
SHOES SLIPPERS BELTS
HARNESSES ETC.
A FINE RICH BLACK

MANUFACTURERS
WHITAKER & CO. COLOUR WORKS KENDAL.
(England)
ESTABLISHED 1878
LONDON DEPOT, 8, Milk St. London, E.C.

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EASILY APPLIED. DRIES AT ONCE.
ONE APPLICATION. DOES NOT RUB. WATERPROOF.

Articles done with this black may be polished and worn 15 minutes after application. In bottles 6d. each, in separate neat carton with suitable brush.

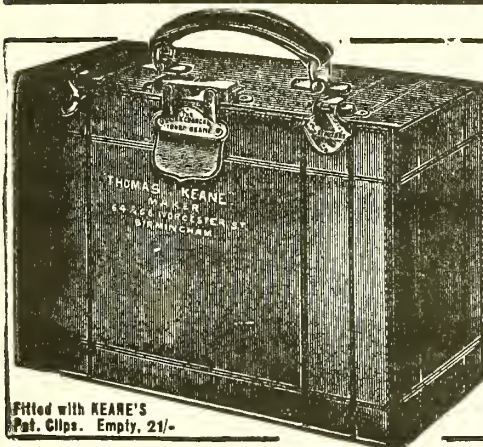
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MILLARD BROTHERS LTD.,
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Fitted with KEANE'S
Pat. Clips. Empty, 21/-

ARE YOUR TRAVELLERS MODERNLY EQUIPPED?

THOMAS KEANE, ENGLISH COWHIDE,
64, 66, and 68 Worcester St.,
BIRMINGHAM, SAMPLE CASE MAKER.

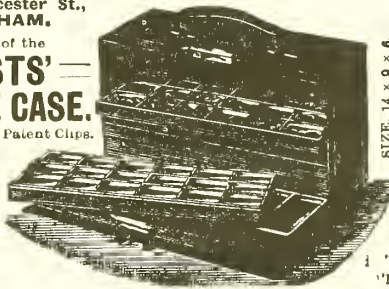
Manufacturer of the
"CHEMISTS' EXCHANGE CASE."

Fitted with Keane's Patent Clips.

Complete with 8
Trays (with 7 or
18 Divisions to
each Tray). 27/6.

FACTORY:
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Write for Illustrated
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Telegrams:
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THE LONDON & COLONIAL MANUFACTURING CO.,
8, MILDWAY CHAMBERS, BISHOPSGATE, LONDON, E.C.
Patentees and Manufacturers.

"APCEL" For Rheumatism.

(TRADE MARK)

Prices: 2/9, 4/6, & 11/-.

Manufactured by

H. EWBANK SMITH, 5 Norman Road, St. Leonards-on-Sea.

Under 6 bottles to be obtained of London Patent Medicine houses.

COCKROACHES CLEARED WITH BLATTIS, THE UNION PASTE.

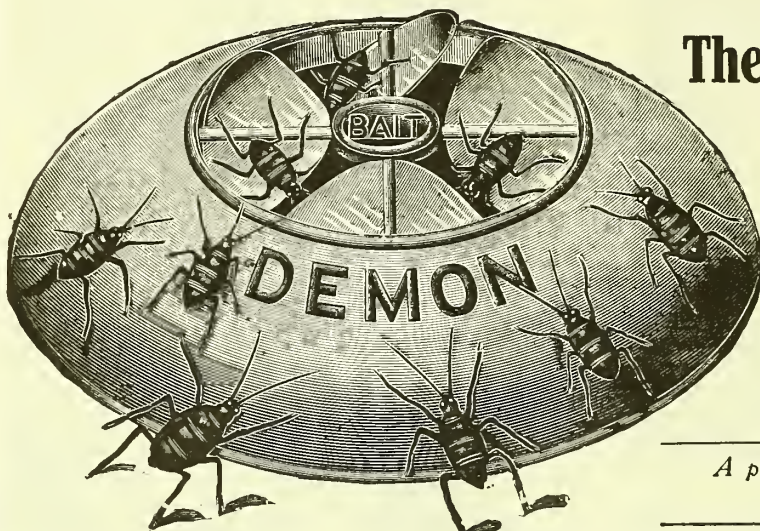
Guaranteed by E. Howarth, F.Z.S., who destroyed a plague of them at Sheffield Workhouse in 1896.

Supplied by order to the Royal Household at Sandringham.

Recommended by Dr. H. Woodward, F.R.S.; Canon Kinton Jacques, R.D.; by Mrs. Earle in "Pot Pourrie" and all Ladies' Papers, Cookery Books, &c.
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The "Demon"

(REGISTERED
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BEETLE TRAP.

See that the name "Demon"
is stamped on every trap.

*A profitable side-line
for all Chemists.*

JOSEPH SANKEY & SONS, LTD., BILSTON.

NO MORE TROUBLE FROM BIRDS,
ROT OR VERMIN.

CORVUSINE D.G.

The Wonderful Non-Poisonous
Liquid Seed Dressing.

Used in large quantities
by Farmers everywhere.

Sold in cans @ 4/6, 10/6, 20/-, 45/- each

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farmer clientele, from—

ARTHUR E. HAWKER, 59 Mark Lane, London, E.C.



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In bottles, 6d. each, in separate neat cartons, with suitable brush.
These Dyes are a distinct invention, dyeing the straw without
an objectionable varnished appearance, and producing the
effect of new goods. On the P.A.T.A.

Write for terms, patterns, also leaflet of testimonials:
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SPECIALISTS IN VARNISHES, STAINS, DYES, &c. EST. 1878.
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Diagnosis is easy, the remedy not always apparent, for to increase returns more custom must be brought in.

**DROP
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for Sample
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and Terms.

We are prepared to show you how we will
help you to largely increase your returns.

IT WILL COST YOU NOTHING !

Then why not investigate ?

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LONDON { CLEARING OFFICE: LLOYDS AVENUE HOUSE: E.G.
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**Dr. HOMMEL'S
Haematogen.**

Dr. HOMMEL'S HÆMATOGEN

:: (The Original Hæmatogen) ::

As recommended by the Medical Profession for the last 20 years.

THE BEST BLOOD BUILDER, NERVE & BRAIN FOOD.

Please note that when you are asked for Dr. Hommel's Hæmatogen or Hommel's Hæmatogen **nothing else may be supplied except our well-known Hæmatogen**, as we have special legal rights to the designations Dr. Hommel's and Hommel's Hæmatogen.

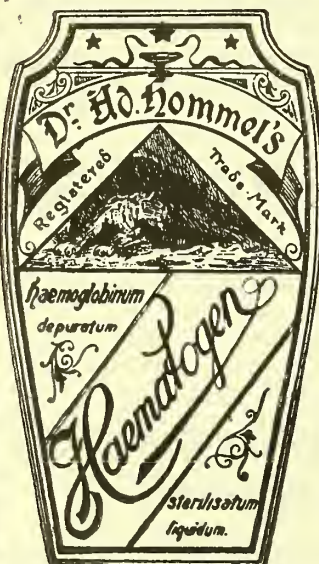
Further, our Hæmatogen has for so long enjoyed an unrivalled sale in this country that Doctors and others frequently refer to it simply as "Hæmatogen"—in such cases it is our Hæmatogen which is required.

BE CAREFUL THAT YOU GET THE RIGHT ARTICLE.

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SOLE AGENTS IN THIS COUNTRY AND FOR THE COLONIES:

GERTH VAN WYK & CO., 36 & 36a St. Andrew's Hill, LONDON, E.C.



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The makers of the well-known brands of Pure Block Juices "V.B." and "B.X.," who are the largest manufacturers of Liquorice in the World, beg to notify the Trade that they now manufacture a high-class **PURE STICK JUICE** which they have placed on the market under their registered brand "**APOLLO.**"

The same guarantee of absolute Purity, which for the past sixty years has been given with their Block Juices, equally applies to their new stick "**APOLLO.**"

Can be obtained of all the leading wholesale Houses.

"SOLAZZI" LIQUORICE JUICE
THE CHEMISTS' BRAND.**'The Lancet' says: 'Of Standard Purity'**

Recommended also by 'The British Medical Journal,' 'Health,' 'The Chemist and Druggist,' 'Food and Sanitation.'

Ask for SHOWCARDS and HANDBILLS. To be obtained of all Wholesale Houses.

WHOLESALE TRADE ONLY.

Established 1900.

DR. B. W. GATHERGOOD'S EXOR.

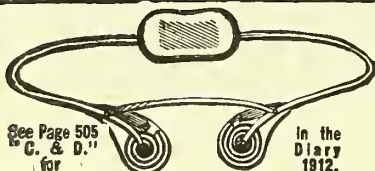
— Terrington St. John, WISBECH —

**For GREEN EXTRACTS and DRIED HERBS
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Prompt Sales Increasing Demand Quick Turnover

You stock "Wincarnis"—our advertising sells it for you. There is an enormous and ever-increasing demand for "Wincarnis" because it is a good article backed up by a powerful advertising campaign. Don't risk losing sales through being out of stock. Glance at your stock now.

COLEMAN & CO., LIMITED,
Wincarnis Works, Norwich.



See Page 505
"C. & D." for

In the
Diary
1912.

THE "SPIRAL SPRING" TRUSS.

FOR ALL PARTICULARS
APPLY TO THE INVENTORS AND MAKERS,

WILLIAM COLES & Co. 5 SACKVILLE STREET,
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B. ROBINSON & Co., LTD., PENDLETON, MANCHESTER.

Established
1855.

ORIGINAL

Excise Drawback on
Export Orders.

CONCENTRATED WATERS.

STANDARDISED TO B.P. 1898.

When diluted in the proportion of one part to forty parts of water at 60° temperature, they faithfully represent the Medicated Waters of the British Pharmacopœia. They are always of uniform strength, and will keep good any length of time in any climate.

Aqua Amygd. Amar. Conc. (U.S.) 4/- per lb.	Aqua Cassia Conc. ... 4/- per lb.	Aqua Ment. Virid. Conc. ... 4/- per lb.
" Anethi, Concent. ... 4/- "	" Flor Aurant. ... 8/6 "	" Pimentæ " ... 4/- "
" Anisi " ... 4/- "	" Sambuci Conc. ... 8/6 "	" Pulegii " ... 4/- "
" Camphoræ " ... 4/- "	" Fœniculi Conc. ... 4/- "	" Rosemarini " ... 4/- "
" Carui " ... 4/- "	" Ment. Pip. Conc. ... 4/- "	" Rosæ " ... 8/6 "
" Cinnam. Ver. Conc. ... 6/- "	" Ang. Conc. ... 6/- "	" Virgin " ... 10/6 "

The above may be had in ½-lb., 1-lb., or 1-lb. Bottles and upwards, through most of the Wholesale Drug Houses.
Each Bottle has the Inventor's Protection Label over the Cork, without which none are genuine.

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Samples of any of the above, sent free on application.



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The Popular American Antiseptic.

A non-toxic antiseptic of known and definite power, prepared in a form convenient for immediate use; of ready dilution, slightly, pleasant, and sufficiently powerful for all purposes of asepsis—these are advantages which Listerine embodies.

The success of Listerine is based upon merit, and the best advertisement of Listerine is—Listerine.

LISTERINE DERMATIC SOAP

Designed to meet the most exacting requirements of a saponaceous detergent for use in the antiseptic treatment of diseases of the skin. No animal fats, and only the best vegetable oils enter into its composition, and of these it contains a surplus, "superfatted." It is a bland, unirritating and remarkably efficient soap.

LISTERINE TOOTH POWDER

This powder is not intended to supplant Listerine in the daily toilet of the teeth, but is offered in response to the demand for a frictionary dentifrice to be used in conjunction with this well-known and time-tried antiseptic.

Listerine Tooth Powder, like Listerine, will advertise itself by its intrinsic merit.

BRITISH TRADE SUPPLIED BY

MAW, SON & SONS, 7 to 12 Aldersgate St., London, E.C.

General Agents for Great Britain.

FOR DESCRIPTIVE LITERATURE, ADDRESS—

LAMBERT PHARMACAL CO., St. Louis, U.S.A.

SODA-WATER MACHINERY.

By the use of our latest Back Pressure Filling Machines only half the usual quantity of Gas is used for the manufacture of the Highest quality Soda-water, either in Syphons or Bottles.

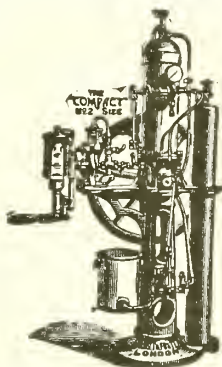
THE "COMPACT" MACHINES

are specially designed for
CHEMISTS, GROCERS, RESTAURATEURS,
and everyone to whom space is an object,
and can be used for filling Syphons, Codd's
Bottles, or Cork Bottles.

**OCCUPY LITTLE SPACE!
ARE READY FOR USE IMMEDIATELY!
REQUIRE NO FIXING!**

Produce Soda Water, Lemonade, &c., of the
highest class and greatest purity.

Write for Catalogue.



**A COMPLETE APPARATUS—
CAPABLE OF PRODUCING OVER
300 DOZEN LARGE BOTTLES
OF AERATED WATER PER DAY
—FROM £20.**

Bottles, Boxes, Essences, and all
Requisites for the Trade at
Lowest Prices.

BARNETT & FOSTER, Niagara Works, 26th Eagle Wharf Road, N.

Proprietors of Galloway Bros., Bolton.

A. MILLAR & CO., LTD., DUBLIN PURE ORANGE WINE

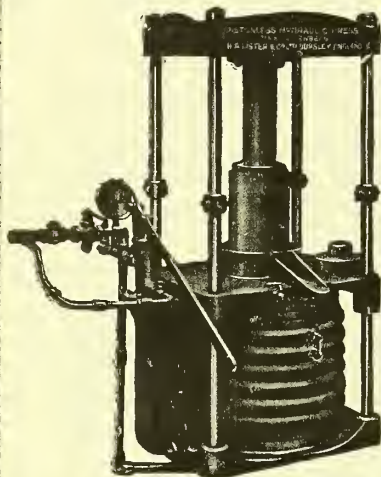
(VINUM AURANTII, B.P.)

Prepared in strict accordance with the Formula of the British Pharmacopœia.
London Agent: JAMES STIRTON, 23 ST. DUNSTON'S HILL, E.C.

(Wholesale only.)

The PISTONLESS HYDRAULIC PRESS

EXTRACT YOUR OWN ESSENCES, OILS, ETC. BY A
FAR CHEAPER METHOD THAN DISTILLATION.



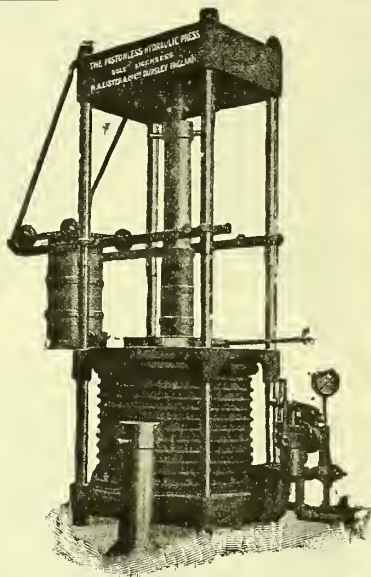
2-Gallon Tincture Press.

THIS PRESS WORKS
DIRECT from the
Ordinary Water Main.

Requires No Pumps. No Special Founda-
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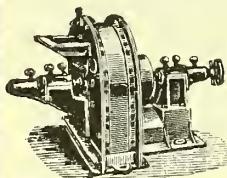
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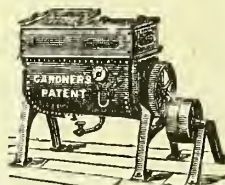
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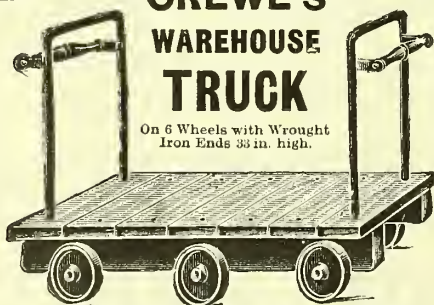
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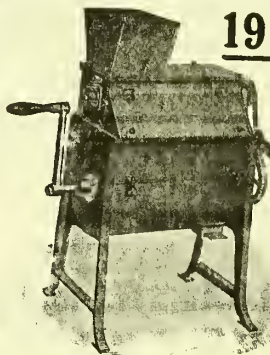
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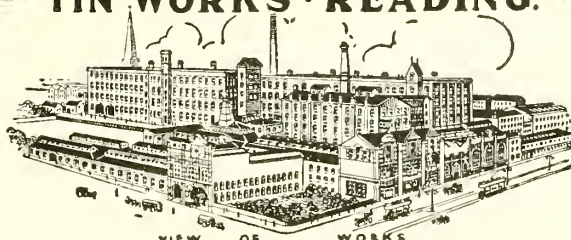
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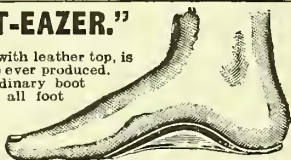
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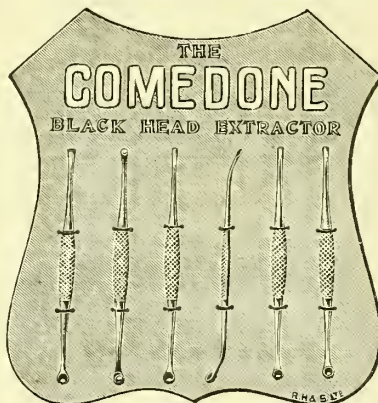
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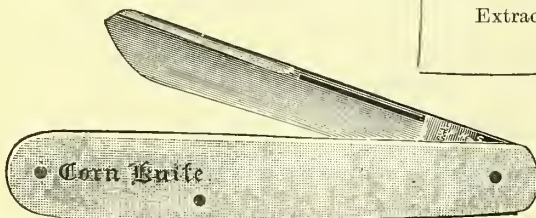
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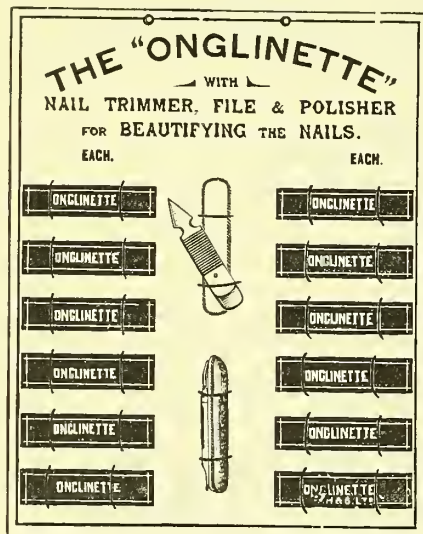


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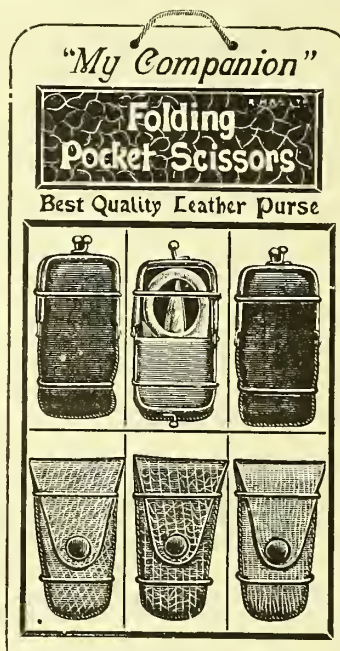
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OFFICE: 42 CANNON STREET, E.C. SATURDAY, SEPTEMBER 21, 1912

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We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

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- 2.—KENT.—Sound Light Retail Business, in best position; returns £1,400; net profits £314; books kept by accountant; good premises; own property; price valuation, about £750.
- 3.—DEVON.—Light Retail and Dispensing Business, in good Market town; returns £700, increasing; net profit £190 to £200; excellent house and shop; very heavy stock; handsome front; price £600; worth attention.
- 4.—SOUTH COAST.—Light Family Retail and Dispensing; 4,600 Prescriptions last year; returns £870; very few Patents; no side-lines; very good position; good house and shop; price for quick sale £450.
- 5.—WILTSHIRE.—Old-established Light Retail, with Wines and Spirits, in same hands many years; returns about £900; plenty of scope; well-stocked shop; good house; price £600.
- 6.—SURREY.—Good-class unopposed Retail and Dispensing Business; returning about £650; net profit £200; convenient house; well fitted and stocked; price £550.
- 7.—LINCS.—Unopposed General, Country Retail, under manager; returns £450; scope for much increase; low rent; shop recently refitted and restocked; price £275, or valuation.
- 8.—NORTH-EAST COAST.—Neglected Cash Retail and Prescribing Business; returns £820; was doing £1,150 and can again; fine shop in splendid position; price valuation, about £500.
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- 10.—LONDON, W. (15 miles out).—Good-class Business, practically unopposed; death sole cause of selling; net profit about £300; attractive shop; good stock; price £600.
- 11.—YORKS (Inland Health Resort).—First-class Retail and Dispensing; returns £1,500; good profits; splendid position; elegantly fitted and fully stocked; price £1,150; worth attention.
- 12.—EASTERN COUNTY.—Sound unopposed Village Business; no Oils or Paints; returns £750; net profit £300; low rent; nice house and large garden; price £525.
- 13.—GLAMORGANSHIRE.—Unopposed Light Retail, in rapidly growing district; returns £828; plenty of scope; net profit about £250; own property; selling through failing health; price £350; stock and fixtures worth £450.
- 14.—DERBYSHIRE (Market Town).—Sound Light Retail Business in growing town; returns about £500; plenty of scope; very low rent; modern Pharmacy; good position; price £250, or valuation.
- 15.—HAMPSHIRE.—Owner, going abroad, will sacrifice snug little Business in good market town; returns £8 weekly; can be much increased; low rent; price £135; £50 can remain.
- 16.—CHESHIRE.—Unopposed good-class Business in rapidly growing district; returns £565; net profit £200; good house and garden; price £335; strongly recommended.
- 17.—MANCHESTER.—Neglected Suburban Business; returns £500 under management; plenty of scope; corner position; main road; low rent; 700 to 800 customers weekly; price £200.
- 18.—WEST OF ENGLAND.—Old-established Retail Business, in small town; returns over £500, and increasing; low rent; good house; large shop, fully stocked; price £400.
- 19.—LONDON, N.W. (10 miles out).—Good-class Family Retail, in best position of rapidly growing district; returns £1,100, increasing; elegantly fitted, fully stocked; modern house; price £950.
- 20.—LONDON, S.E.—Good-class Retail Business; no side-lines; returns £950; net profit £258; books properly kept; well fitted and stocked; price £650, or valuation terms arranged.

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COLONIAL BUSINESSES.

We call the special attention of our Colonial subscribers to the opportunity this Supplement affords when they wish to dispose of their Businesses, of getting into touch with likely buyers either at home or in the Colonies.

LETTERS in reply to Advertisements may be addressed to this Office, and will be forwarded to the Advertiser for an additional charge of 6d.

Trade circulars, samples, and printed matter can in no case be forwarded.

BIRMINGHAM.—Must sacrifice owing to ill-health, an old-established Cash Drug Stores, at valuation of Stock and Fixtures; corner shop, with good scope for Dentistry. Reply "Ill-health" (171/20), Office of this Paper.

BLACKPOOL.—For Sale, good Family and Dispensing Business; owner retiring; only applicants furnishing references treated with. Apply 170/32, Office of this Paper.

BRISTOL.—Cash Business, Dispensing, Retail, and good Prescribing; splendid position in busy main thoroughfare; low rent and expenses; good fittings in mahogany; well stocked; convenient premises; increasing trade; lease. Apply, "Chemist," c/o Mr. Fifoot, 62 Park Row, St. Augustine's, Bristol.

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CUMBERLAND.—An old-established Mixed Business in pleasant market town; splendid opportunity; satisfactory reasons for disposal; stock (small) at valuation. Apply "Chemicus," Messrs. Wilkinson & Simpson, Wholesale Druggists, Newcastle-on-Tyne.

HERTS.—Unopposed Country Business; safe living; average takings last three years £422, third profit, increasing; plenty scope; qualified or unqualified; rent £20; compact, well fitted and stocked shop; covered side entrance; good house and fruit garden; £170 cash; for quick sale through illness. 167/13, Office of this Paper.

LANCASHIRE.—For immediate Disposal, a good-class Chemist's Retail Business; established 25 years; returns £600; good house attached; will sell at a great sacrifice below valuation; satisfactory reasons for disposal. Apply, "J. Sidebottom & Co., Littleborough.

LIVERPOOL (populous suburb).—Pharmacy Business, with good growing Optical connection; present net income over £200 a year; vendor, going abroad, will sell for £400 and give personal introduction. Apply to Mr. F. Child, 8 Oakdale Road, Waterloo, Liverpool.

LONDON, E.—A newly-fitted Pharmacy in Market Centre; rent £32; good house; price £125; will accept £75 down and balance by instalments; trial allowed. 172/32, Office of this Paper.

LONDON, S.E.—Sound Family Retail and Prescribing Business; same hands 17 years; good main-road position; net profit nearly £200 a year; excellent opening for Photographic and Dentistry; large shop, good windows, well stocked; price £230; fullest investigation courted. Address, "Prescriber" (173/12), Office of this Paper.

LONDON Suburb.—Well-established Cash Retail Business, in fine shopping centre; returns £2,000; net profit £500; modern-fitted shop, well stocked; low rental; valuable lease; will accept first offer of £900; only cash buyers entertained; business will stand fullest investigation. Address, "Zeto" (173/201), Office of this Paper.

MANCHESTER (near).—Chemist, desirous of retiring, is open to Dispose of his Cash Business privately; newly fitted shop and excellent house; clean profitable business, with Branch Post-Office attached but work separately; salary covers rent, rates, and taxes; a valuable asset. Apply, by letter, to "Chemist," Post Office, South Levenshulme, Manchester.

MANCHESTER (two miles).—Old-established Business, with Wine Licence; busy main thoroughfare; healthy locality; convenient house; rent £45; business small, but profitable and capable of extension by energetic man; owner desires to sell through age; low price, £175; the stock is good and worth the money. T. Gresty, 175 Broad Street, Pendleton.

MANCHESTER (near).—Old-established Prescribing and Extracting Business, situated in a working-class district; turnover £400; net profits £150; suit unqualified; owner taking a larger business will accept nearest offer to £80, which is much less than the value of Stock and Fixtures; a genuine bargain and open for investigation. 169/32, Office of this Paper.

MANCHESTER (Suburban).—Smart, well-lighted, modern and well-fitted Chemist's Business (Light Retail, Dispensing, and Prescribing) to be Sold; pleasantly and well situated in an exceptional position on the main road, growing district; turnover over £500; could be doubled; price wanted much less than value of Stock and Fixtures; a live bargain to first genuine offer; this is an exceptional opportunity for man with cash to acquire a sound business with very small outlay. 169/29, Office of this Paper.

MIDLANDS (North).—For immediate Disposal, the Business of a small Chemist and Druggist; in a good position; with shop well fitted and stocked; scope for Insurance Dispensing; main road; personal qualified attention only wanted; modern house; low rent; valuation or lump sum. 169/70, Office of this Paper.

MIDLANDS.—Old-established General and Country Business for Sale; opening for Dentist and Optics; good Prescribing; good centre for farmers; returns average over £500; well stocked; good house; good reason for disposal; suit young man willing to push; rent £35, with lease. Apply 170/6, Office of this Paper.

MIDLANDS.—Old-established Chemist's Business for Disposal; returns £350; proprietor giving up on account of ill-health will accept valuation. Apply for particulars, "Revoac" (172/33), Office of this Paper.

SOUTH DEVON.—To be Sold, as a going concern, good-class Light Retail and Dispensing Business; main thoroughfare; satisfactory reasons for disposal; good house; turnover £1,160. For price and particulars apply "Devon" (165/5), Office of this Paper.

SOUTH DEVON (Coast).—Returns £1,200; Light Retail and Dispensing; nice position in main thoroughfare; good house attached; in present hands now for more than a quarter of a century; net profit about one-third; moderate rental; held on lease; price £980; curiosity inquirers save stamps, genuine ones well treated. 52/39, Office of this Paper.

SOUTH LONDON (Seven Miles Out).—Genuine long-established Family Business; attractive shop in good position; exceptionally well fitted and stocked; large roomy house; returns nearly £1,000; neglected of late, can be increased by modern methods, advertising, and side-lines; books well kept; fullest investigation invited; net profit, after paying all expenses and accounts, is 27 per cent.; price £650, or valuation; recommended by leading houses. Apply "Libra" (168/36), Office of this Paper.

SOUTH OF ENGLAND.—Fashionable Resort; good-class Business in very best position and showing steady increase each year; returns £1,450; clear net profit £400; splendid house; low rental; handsome shop; very heavily stocked; genuine reason for selling; price £1,100; only cash buyers entertained. "B. P." (170/102), Office of this Paper.

SURREY (near Richmond).—Profitable middle-class Cash Business; returning £450, and capable of considerable increase; selling solely through lack of capital; large residential district; slight opposition; attractive, well-fitted shop, main-road position; nice house; price for quick sale £250. Apply "Immediate" (173/120), Office of this Paper.

SUSSEX.—Country Business, good class, Dispensing, Prescribing, and General; few Patents; some very good Proprietaries; average returns £400; net profit about £150; might be much extended under energetic man; shop well fitted and stocked; good house and garden; price £250. "Alpha" (168/21), Office of this Paper.

THAMES VALLEY.—Good-class Family Retail Business for immediate Sale; established 80 years; in same hands 18 years; well stocked shop in main thoroughfare of populous district; many valuable Proprietaries; large Photographic and Dental connection; also Optical connection, which could be considerably developed; death sole cause of disposal. Apply, "Financier," Lawn View, Church Road, Kingston-on-Thames.

WOLVERHAMPTON.—Good middle-class Business in splendid position; no opposition; returns £560 under unqualified management, qualified would greatly increase; few Patents; exceptionally good opening for Dentistry; well-fitted shop; Fixtures and Fittings £120; Stock at valuation, about £250; could be reduced if necessary. Nowill, 106 Stafford Road, Wolverhampton.

A PROFITABLE Business (Drug and Fancy Trade) for Sale near to King's Cross; double-fronted shop; small house, private entrance; expenses low; returning about £500 per annum; suitable for anybody wanting a business; would also pay to run as branch; better value never offered at £185. "Pyramidon" (171/19), Office of this Paper.

CHEMIST'S and Druggist's Business for Disposal; well fitted shop in good position country town; good district; doing £700 per annum; price for freehold premises, fixtures, fittings, utensils, and stock £700. Full particulars of Ernest S. Beard & Daniels, Valuers, Colchester.

FOR immediate Disposal, small Business in thriving country town, situated main street; double-fronted shop, with house attached; fixtures and fittings new; turnover £500, with good scope for increase; rent low (£28 and rates); satisfactory reasons for disposal and no reasonable offer refused. Dyson, Alfreton, Derbyshire.

FOR immediate Disposal, good old-established Business in Lancashire town; gross profit (including branch) over £600; well fitted and stocked; Wine Licences held. Apply, "Health" (170/33), Office of this Paper.

FOR Sale; London; choice of one or two Cash Retail Businesses; S.E. or S.W.; prices ranging from £100 to £300. Apply, by letter only, to "Drugs," Eldon Street House, Eldon Street, E.C.

GENUINE Business, turning over £850, only about 18 per cent. of which is Patents, can be had by prompt buyer at lump sum or valuation, as desired; can be greatly increased; London suburb, one of the best for business, thickly populated yet pleasant and open; cash; middle-class; modern shop and house. Write 170/31, Office of this Paper.

GENUINE Business for Sale in Maidstone; excellent position; low rent; takings (under management) £10 to £12; very few Patents sold; price, valuation of stock, about £200; use of the up-to-date fittings is included in the rent; resident proprietor could easily treble takings. Apply, Race, 147 High Street, Tonbridge.

GOING Abroad.—My middle-class Business, situated in main thoroughfare of Crouch End, for immediate Disposal; rent £70, let off £47; will accept £350 by end of month; after this date will not be offered for disposal; no agents. Address, "Watkins," 21 Topsfield Parade, Crouch End, N.

RETURNS £1,000.—Splendid opportunity for acquiring a genuine old-established Business in healthy London suburb; very profitable and easily worked; vendor's own property; excellent living accommodation; main road; opposition meagre; owner leaving Chemist's business, having accepted lucrative position in another trade; every possible investigation allowed and prospective purchaser given ample trial; excellent possibility for Optics; well in with principal doctors, to whom introduction would be given; bona-fide purchasers only, who must give references before negotiations can be entered into; no agents need apply; price £700 net. Apply 53/15, Office of this Paper.

£35 down and £25 by instalments will secure genuine little Business in S.W. suburb; main road; small house; low rent; has been managed by lady; great scope for increase by Prescriber and Extractor; very few Patents; splendid opportunity for beginner; well stocked. Apply first, "T.," 191 Longley Road, Tooting Junction.

£80 or near offer.—Smart little Pharmacy for Disposal; manufacturing city (Midlands); busy thoroughfare; densely populated neighbourhood, working and middle-class locality; open 18 months; turnover £350; rare opportunity for Dentistry or Optics; good house; owner taking wholesale post immediately. 170/7, Office of this Paper.

£100 Bargain; death of owner; must be sold; well-stocked Shop; small Retail; much Prescribing; few Patents; over half profit; good house, newly decorated; nice garden; rent only £25; lease; no opposition; main road; buses, trams pass door; established 40 years; exceedingly healthy neighbourhood. "F. H.," 100c Queen Victoria Street.

£130 or nearest offer for immediate Sale; S. Yorks; good working-class district; turnover last year about £500; net profit 33 per cent.; rent 10s. a week; house can be let off at 6s.; rates and gas very low; part of purchase money could stand over to suit purchaser. 171/1, Office of this Paper.

BUSINESSES WANTED.

LANCASHIRE; seaside or Manchester district preferred; Light Retail; profits at least £200; must bear investigation. Replies in confidence to "Lancastrian" (159/12), Office of this Paper.

ADVERTISER is open to negotiate for a Business; returns from £300 to £1,400; London or large town. Full particulars to Ashley (158/9), Office of this Paper.

WANTED, medium-class Cash Retail, West or South of England, net profit not below £150 per annum, where there is scope for great increase by modern methods; must be good house attached; ready to take over genuine concern shortly. Apply, with full particulars, in confidence, "Chemist," Maplecroft, Bradley Road, Trowbridge, Wilts.

TO LET.

CARDIFF.—Chemist's Shop and Premises to Let in suburb; well fitted up; no Bottles; or would dispose of the fixtures; a bargain. David Rees, 38 Carlisle Street, Cardiff.

COMMANDING corner Premises, also smaller one partly fitted up, to Let; good opportunity for Chemist and Druggist, also Dentistry; large neighbourhood; no opposition; good house; very low rental. Keys at Caretaker, Central Market, 274 Hither Green Lane, Lewisham, S.E., or conditions of Owner, "F. H.," 65 Holland Road, Kensington.

THE Proprietors of the Elephant Hotel, Market Place, Pontefract, the very best shopping centre, are rebuilding the front and invite applications for three Shops, or can be made into one or two as applicants desire. Address, in first instance, 49/58, Office of this Paper.

TO Let, to Chemist and Druggist only, from September 29 next, the House, Shops, Premises, Land and Stables now in occupation of W. S. Greaves, Ltd., Wholesale and Retail Chemists and Druggists, Ironville, Alfreton; good business and monopoly guaranteed to energetic man. Apply to the Butterley Co., Ltd., near Derby.

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COLONIAL.—Local Agents wanted in Fever districts for a Proved Malaria Specific; liberal margin of profit in handling. Buying agents please apply 146/4, Office of this Paper.

FRANCE.—Advertiser is open to introduce a genuine Pharmaceutical Speciality to the Medical Profession of Lyon and district; highest references. Charles Appert, 17 rue Romarin, Lyon, France.

AGENCY Wanted.—Young Chemist going to United States wishes to take Agency for goods of any description, particularly high-class Retail Specialities. Apply, with full particulars re class of goods and terms, to 175/4, Office of this Paper.

EXPERIENCED Traveller on Lancashire ground is open for a good Agency; good connection amongst best Chemists and Stores. "Ajax" (171/21), Office of this Paper.

HIGH-CLASS Medicated and Toilet Soaps and Toilet Requisites. Wanted, by old-established firm of Soap Makers, Agents having a good connection amongst Chemists, Druggists, and Hairdressers in the London, Midland, Lancashire, and Yorkshire districts. Apply, 51/34, Office of this Paper.

LARGE firm of Manufacturing Confectioners desire to appoint gentlemen on commission who have good connection amongst Chemists for Medicated Confections and Winter lines. Apply, giving full particulars as to firms represented, etc., and ground covered, 156/35, Office of this Paper.

MANUFACTURERS requiring London Agents, known throughout the Drug Trade of the world, having ample space for Storage, might communicate. H. E. Stevenson & Co. (for many years Director of Balis Brothers & Stevenson, Ltd.), 122 Great Suffolk Street, S.E.

TRAVELLER, residing in Johannesburg, calling on Chemists, Hospitals, and Government Institutions throughout South Africa, would like to take up special lines that would not clash on a commission basis and part expenses. Apply, "C. B." (156/28), Office of this Paper.

BRUSSELS.—Advertiser, with office and dépôt, and a good connection among Druggists, Oil and Colour Men, Painters, etc., is open to take up selling Agency for good British house. Apply to O. Kater, 47 rue du Chemin de Fer, Brussels.

PARTNERSHIPS.

PHARMACIST and Optician (F.S.M.C.), with a small capital, desires a Partnership in a good-class business; the management of a branch business with view to succession would be entertained. Apply "Metol" (171/5), Office of this Paper.

APPRENTICESHIPS.

WELL-EDUCATED, energetic Apprentice wanted: '5 years' apprenticeship; wages paid; excellent opportunities for learning the business; Dispensing, Chemical Apparatus, Agricultural and Family trade. Bainbridge & Finlayson, Stockton-on-Tees.

YOUNG man (17), height 5 ft. 8 in., wishes to Apprentice himself for three years in return for board and lodging. Please reply, "Rhei" (173/14), Office of this Paper.

YOUTH (17), tall, good address, Preliminary, 8 months' experience, wishes to complete Apprenticeship; indoors; good references. McFall, Chantry Road, Alford, Lincs.

YOUTH (20), with 3 years' Retail experience, desires Apprenticeship; indoors; Birmingham or district preferred; must have plenty of time for study. Particulars to "Gelsen" (169/37), Office of this Paper.

SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of 6d.

TO SAVE TROUBLE.

MANY correspondents answering advertisements in this Supplement enclose remittances to cover the cost of forwarding their letters to advertisers who prefer to be addressed c/o this Office. The Publisher desires to make it clear that this is quite superfluous, and perhaps this reminder will obviate the necessity of the frequent return by him of such remittances.

ANSWER IN TERMS OF THE ADVERTISEMENT AND

REMEMBER you are one of possibly hundreds applying for the same position. Put your case before the advertiser so that he may be able to form a **MENTAL PICTURE** of your suitability.

BE BRIEF BUT CLEAR.—Millions of applications are consigned to the waste-paper basket **UNCONSIDERED**, because the reader cannot form this picture from the inadequacy of the materials set before him.

RETAIL.

BALHAM.—Wanted, outdoor Assistant, unqualified, for good-class Retail and Dispensing business; knowledge of Photography necessary; half-day off each week; if applying by letter enclose photo, state salary, and full particulars; abstainer preferred. Cooper, Chemist, Balham, S.W.

BATH.—Wanted, smart young Assistant, accustomed to middle-class Light Retail and Dispensing business; one only kept; very comfortable indoor berth; good progressive salary; no duty after 8 P.M., except on Saturdays; no Sunday duty. Full particulars to Charles Jenkin, Pharmacist, Bath.

BIRMINGHAM.—Improver or Junior wanted for quick Cash Store trade; must be good Salesman and Stockkeeper. Photo, references, and salary required to Lloyd, Chemist and Optician, 323 Coventry Road, Birmingham.

BLACKHEATH.—Wanted early in October, Assistant, about 25, for first-class Retail and Dispensing; must be good Counterman and well recommended. State age, height, salary required (outdoors), and enclose photo (returnable over week-end) to Bailey, Pharmacist, Blackheath, S.E.

BRIGHTON.—Wanted, gentlemanly Assistant at once (indoors), age about 20 to 25, for Light Retail and Dispensing business. Apply, stating age, height, salary required, and enclose photo if possible, to F. Adams, 56 Marine Parade, Brighton.

BRISTOL.—Junior Assistant wanted for Cash Retail and Photographic business; outdoors; half-holiday each week. Apply, stating age, height, salary required, experience, also references and when disengaged, with photo if possible, to F. Moss, 206 Redland Road, Bristol.

BROMLEY (Kent).—Wanted, Qualified Assistant; young; energetic; indoors; comfortable home. Apply, usual full particulars, enclosing photo, Henry Francis, 22 High Street, Bromley, Kent.

BURTON-ON-TRENT.—Smart Junior (outdoors) early in October for good Retail and Dispensing business; essentials—good Counterman and Window-dresser, neat and gentlemanly, practical Photographer, knowledge of Seed trade useful; easy hours; no duty. State age, height, experience, qualifications, and references, with photo, Francis Hallam, Ltd., 22 High Street, Burton-on-Trent.

CARDIFF. — Unqualified Assistant wanted; age 26-30; good worker essential; outdoors; 30s. week. Send copy of references, "X." (170/19), Office of this Paper.

HORLEY.—Junior wanted at once (outdoors) for a good-class business. Send full particulars, stating salary, and enclose photo, A. B. Higgs, Chemist, Horley, Surrey.

LINCOLNSHIRE (Market Town).—Qualified Assistant wanted, accustomed to high-class Agricultural business. Apply, 168/3, Office of this Paper.

LIVERPOOL.—Clubb & Co., 138 Smithdown Road, require two competent Juniors; outdoors; three years' references required.

LIVERPOOL.—Wanted, an Assistant; unqualified; permanency; outdoors. Replies must state salary required, enclose references and photo, "Paregoric," c/o Evans Sons Lescher & Webb, Ltd., 56 Hanover Street, Liverpool.

LIVERPOOL.—Wanted, a smart, capable, energetic Manager for brisk Cash trade; qualified or unqualified; liberal salary and commission to suitable man. Apply, "Phenol," c/o Messrs. Evans Sons Lescher & Webb, Ltd., 56 Hanover Street, Liverpool.

LIVERPOOL Suburb (Cheshire side).—Wanted, an active qualified man to Manage a Branch; married, and to live on premises preferred. Apply, giving full particulars of experience, age, salary expected, to Ferrum, 1 Fairview, Dingle Hill, Liverpool.

LLANELLY.—Wanted, smart Assistant, Welsh essential, for Mixed Retail and Dispensing; indoors preferred. Apply, Wade, Chemist, Llanelly.

LONDON, S.W.—Gentlemanly Junior, with Dispensing experience, required October 14; unqualified; outdoors. Please state full particulars, with age, height, salary required, and enclose photo, E. A. Turner, Chemist, 280 Fulham Road, South Kensington.

LONDON, West End.—Wanted for October 1, a qualified Assistant, accustomed to good-class business; indoors. Apply, giving usual particulars, to H. S. Hairsine, 47 Haymarket, London.

LONDON, W.—Assistant wanted, accustomed to Dispensing business, age about 24, unqualified, to commence duties early October (outdoors) in West-End establishment. Apply, by letter in first instance, to L. S. Lindley, c/o R. A. Potts, Chemist, 62 South Audley Street, Grosvenor Square, W.

RESULTS

OF ADVERTISING IN THIS SUPPLEMENT

LAST WEEK Sept 14 1912

NATURE OF ADVT. REPLIES

DISPENSER FOR DOCTORS 37

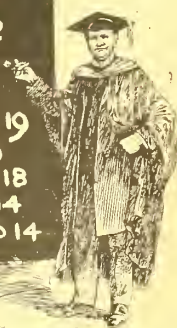
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This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of Advertisers who use a number or name de plume.

LONDON, N.W.—Qualified Assistant (indoors preferred), about 24; high-class Dispensing and Photographic business. Apply, with full particulars, references, salary, etc., Marsh, 270 West End Lane, West Hampstead, N.W.

LONDON, N.W.—Qualified or unqualified Assistant wanted, outdoors, age about 25, for good-class business; must be a competent Dispenser and good Salesman; only one kept. Personal application preferred; if by letter, give full particulars of experience, salary, and enclose photo, T. F. Elton, 28 Endsleigh Gardens, Euston Square, N.W.

LONDON, S.W.—Wanted, qualified Assistant; age about 23; outdoors. Dyson & Co., 35 Gloucester Road, South Kensington.

LONDON, N.—Assistant; indoors; salary £40 to £50, according to experience; hours 8.30 A.M. to 10 P.M.; half-day off weekly; alternate Sunday duty (evening only). Apply, stating experience, when disengaged, and giving names of references, "Chemist," 500 Amhurst Road, Stoke Newington, London, N.

LONDON, S.W.—Wanted early in October, an Assistant, about 24 years of age, with good Dispensing experience. Please give full particulars to Messrs. Plaister & Co., 13 Gledhow Terrace, South Kensington, S.W.

LONDON, S.W.—Wanted at once, qualified Manager, married. For small Branch; good Prescriber and Window-dresser and well up in Photography; house and gas found. State age, salary required, and references, to "Statin" (169/5), Office of this Paper.

LONDON, N.W.—Competent Assistant for brisk Retail trade; must be quick, reliable, and a good Salesman, and possess recent references. State age, experience, salary required, and enclose photo if convenient, "Aspirin" (170/9), Office of this Paper.

LONDON, N.W.—Part-time Assistant wanted in good-class business; Dispensing experience essential; suitable for Minor or Major student. State experience, age, height, time at disposal, with salary required, "Medinal" (170/18), Office of this Paper.

LONDON, W.—Messrs. J. G. Shirley & Son, 60 Westbourne Grove, Bayswater, W., require (immediately) unqualified Assistant; outdoors; age 22 to 25; must be a competent Dispenser and good Salesman; personal interview if possible, otherwise full particulars in first application.

LONDON, W.—Qualified Manager wanted (indoors) in good-class Dispensing business; 1st of October; age 27 to 30; personal application preferred; if by letter, give full particulars, stating salary, age, height, etc., and enclose photo to (Mrs.) E. J. Green, 69 Churchfield Road, Acton, London, W.

LONDON, W.—Required, about end of September, Junior with good Dispensing experience; outdoors. Apply, with particulars of previous engagements, stating when disengaged, and salary expected, to Sharpe & Son, 34 High Street, Notting Hill Gate, W.

MIDLANDS.—Required immediately, qualified Assistant for busy Cash business; one desirous of making progress in the profession preferred. State age, salary required, and references, 170/92, Office of this Paper.

NEWPORT AND MONMOUTHSHIRE HOSPITAL.—Assistant Dispenser wanted; commencing salary £65 per annum. Applications, with copies of three testimonials, to be sent on or before September 25, 1912, to Mr. J. K. Millward, Secretary-Superintendent, Hospital Offices, Newport, Mon.

OXFORD.—Wanted, Manager for Branch. Apply, with usual particulars, to Burbank, Chemist, Oxford.

SOUTHSEA.—Wanted, a capable, gentlemanly Assistant, single, outdoors, age about 25, in a good-class Dispensing and Retail. Apply, with full particulars of age, height, experience, references, and salary required, W. A. Bell, The Strand, Southsea.

TUNBRIDGE WELLS.—Assistant required at once in high-class Pharmacy; Dispensing and Photography. Apply, with full particulars and enclose photo (returnable), H. S. Pearmund, Pharmaceutical Chemist, Tunbridge Wells.

W.—Junior Assistant, with a knowledge of Dispensing. R. Thomas, 97 High Street, Marylebone, W.

YORK.—Wanted, gentlemanly Assistant as Junior for high-class Store trade; outdoors; knowledge of Photography required. Apply, stating age, height, references, and salary wanted, etc., and enclose photo, to Brown's Drug Co., Cash Chemists, York.

ATKINS & SON, Salisbury. require a qualified Assistant, as second or Junior (outdoors), to commence on Monday morning, October 14; must be accurate Dispenser and possess good Photographic knowledge. State salary required and reference, and enclose photo, to W. R. Atkins, 39 Castle Street, Salisbury.

CHEMIST and Druggist, fully qualified, wanted as Manager, not later than September 27. Apply, stating age, qualifications, experience, and wages, with not more than three copies of recent testimonials, to "Chemist," Stocksbridge Band of Hope Industrial Co-operative Society, Deepcar, near Sheffield.

EXPERIENCED, unqualified or qualified Assistant wanted at once; age 25 to 30; Photographic, Agricultural, and General business; abstainer preferred; permanency; outdoors; easy hours. Apply, stating experience, salary required, height, etc., B. C. Jukes, Chemist, Basingstoke.

FIRST-CLASS Assistant required for Counter in the West End of London. Apply, Lewis & Burrows, 146 Holborn Bars, (E.C.), enclosing full particulars, together with photograph.

JUNIOR or Improver immediately; good Salesman and Window-dresser. Full particulars first letter, Shackleton, Chemist, Hereford.

JUNIOR or Improver (outdoors) with time for study. Apply, giving full particulars (not before Tuesday, 24th), to Bell, Pharmacist, London Road, Manchester.

LOCUM (qualified) required for two or three weeks, to commence on September 25; good Salesman, with knowledge of Photography. Please give height, age, and references, also terms, in first letter to Rich, Chemist, Swansea.

LONDON, W.C.—Qualified Assistant, about middle October, not under 25; good Counterman and Dispenser; outdoors. Apply, with full particulars, 173/11, Office of this Paper.

PHARMACEUTICAL.—Wanted, for large Irish house, qualified Assistant; thorough knowledge Retail and Dispensing; young, pushing Salesman; one who has been at large Stores preferred. State age, experience, salary (outdoors), references "S. T." (168/10), Office of this Paper.

QUALIFIED Assistant for good-class Dispensing and Light Retail; indoors. Apply, John Cooper, Pharmacist, Weston-super-Mare.

QUALIFIED Assistant (indoors) wanted for beginning of October in high-class Dispensing and Photographic business; good appearance and address indispensable. Apply, Druce & Co., Chemists, Oxford.

QUALIFIED Assistant wanted early in October; 25 to 35; good Extractor, Impressions, and Fillings; knowledge of Photography and Optics desirable; short hours; no Sunday duty; outdoors. Full particulars, with salary required, to H. S. Adams, Chemist, Pangbourne.

QUALIFIED Manager required for a progressive Cash business taking about £1,100 a year; capital opportunity for young, energetic, married man desirous of settling down in a comfortable permanency. Give full particulars as to age and past experience to 170/29, Office of this Paper.

QUALIFIED Manager (outdoors) for small Branch north-east seaport; would suit active middle-aged man with good references; Light Retail, Prescribing, etc., in a good-class district; half-day once a week; no Sunday duty. State age, references, salary expected, and full particulars, "A. X." (170/22), Office of this Paper.

REQUIRED, Senior Counterman; must be good Salesman and Window-dresser and of good appearance; also a Junior Assistant, accustomed to West-End trade. Write or call, Spink, 27 Tottenham Court Road, W.

T. JONES & Co., 5 Putney Hill, require, about October 1, an unqualified Assistant, age about 24; must be accustomed to good-class Dispensing, and have good references. Apply, with photo, if convenient, to Mr. Amore.

TEMPORARY Assistant wanted for Stocktaking; state age, qualification, reference, and salary required. Apply, Reade Brothers & Co., Ltd., Wolverhampton.

UNQUALIFIED Manager, married, wanted, Seaside, age 26 to 33, height not under 5 ft. 7 in., for smart Drug Stores; must be good Salesman and Window-dresser; progressive salary, commission on profits; permanency; good prospects. State age, height, experience, when disengaged, salary, if possible photo, "Chemist," 18 Mount Zion Place, Brighton.

WANTED, an Assistant, about 23 to 25, (qualified), for Dispensing business. State age, height, salary (indoors), when disengaged, experience, if Dispensing and Photography, names of two last employers, and time with each, 167/37, Office of this Paper.

WANTED, Junior; must be a quick, willing worker, accurate, of good appearance, and address; indoors. Apply by letter, with photo and usual references, to C. S. White, Ph. Chemist, 43 Buckingham Palace Road, London, S.W.

WANTED, for Health Resort, a gentlemanly Assistant, of good appearance and address, experienced in first-class Dispensing and Retail, to occupy rooms over business premises; qualification not essential, but good references indispensable. Apply, with full particulars as to age, salary, experience, etc., enclosing photo if possible, to 169/35, Office of this Paper.

WANTED, Junior Assistant (outdoors) for a Dispensing and General business. Address, with usual particulars, "Chemist," 1 Azalea Terrace, North Sunderland.

WANTED, Branch Manager, qualified, early in October; outdoors; must be an experienced Dispenser and good Counter-man, accustomed to good-class business; abstainer; permanency to suitable man; full particulars, with references and photo in first letter. Apply, W. Barker, 9 Grimsby Road, Grimsby.

WOMAN Pharmacist required for Manufacture of Ladies' Toilet Preparations; must have had experience in manufacturing; applicants must state full particulars of qualifications, experience, and salary required. 173/8, Office of this Paper.

WANTED, in the beginning of October, a qualified man, about 34, married, to take charge of a small business just commencing in country town of 5,000 inhabitants; unfurnished house found; must be a good Salesman and Business-builder, with knowledge of Photography and able to introduce Optics if possible; one seeking a permanency desired, and abstainer preferred. State age, height, references, and salary required (which must be moderate, as a commission on returns will be offered) to "Eastern County" (54/7), Office of this Paper.

WANTED at once, qualified Manager for Branch, East End; must be steady and well recommended. Apply, "Verax" (54/10), Office of this Paper.

WHOLESALE.

A LONDON Wholesale house require the services of a competent Travelling Representative in Sales Department; must be experienced in Pharmaceutical Proprietaries and introductory work with Medical profession and Retail trade; sales-extension from headquarters and supervision of travelling staff; applicants should possess advertising literary qualifications with trade experience. Replies, by letter, giving fullest particulars, received in confidence by "Semper" (38/230), Office of this Paper.

INVOICE Clerk wanted for Wholesale Druggists, South London, to work under head; must be quick and accurate. State experience, age, and salary expected to 52/68, Office of this Paper.

JOINT Manager sought for Australian branch of progressive English Agency house; must be experienced in Pharmaceutical Proprietaries; sales-extension with Medical profession and Retail trade, also in control of travellers; applications are invited, in confidence, from those of proved character, qualified for a position of trust, with travelled experience of the ground and connections. Give usual particulars, by letter, confidentially, to "Idem" (38/23), Office of this Paper.

LABORATORY Department.—Wanted, an Assistant, experienced in Dispensing private Formulae and Preparations generally. Address, stating age, salary required, "Laboratory" (52/50), Office of this Paper.

QUALIFIED man, age about 24, wanted by a London firm of Wholesale Druggists for a vacancy on their indoor staff: candidates should possess a thorough business training, be good Salesmen and of courteous address, as the duties of the position include interviewing Medical Men. Apply, with full particulars of previous experience, stating age, salary required, etc., to 54/16, Office of this Paper.

REPRESENTATIVES required for Lancashire, Yorkshire, and the Midlands, with good live connection, to sell Packed Goods and Toilet Preparations. Reply, in strict confidence, with full particulars as to turnover, remuneration, etc., to "Ragie" (52/33), Office of this Paper.

SURGICAL Instruments, etc.—New Company, opening October, requires Representative for London; must be hard worker and have connection; agreement offered, with salary and commission off ground. Apply, by letter, to Edwards, 85 Mortimer Street, W.

TRAVELLER to call upon Chemists U.K. whole time; first-class appearance and address absolutely essential; salary, expenses, and small commission; state age and salary required; fullest details should be given of previous experience and connection if any; photos will be returned. 168/29, Office of this Paper.

WANTED, a young man, about 18 to 20, with experience at the Wet Counter; must be thoroughly competent. Apply personally, or by letter, stating age, previous experience, and wages required, to W. F. Fogarty, Managing Secretary, General Apothecaries' Company, 49 Berners Street, W.

WANTED, by Canadian Wholesale Drug firm, experienced Chemist, competent to take charge of Laboratory. Reply, stating experience, views as to salary, and full information as to character of goods you are accustomed to manufacture, 41/40, Office of this Paper.

WANTED, a capable man with good all-round experience in the Manufacture of Proprietary Articles and Pharmaceutical Preparations; permanency and good opening to the right man not afraid of work. "Specialities" (257/45), Office of this Paper.

WHOLESALE Drug Trade.—Messrs. C. J. Hewlett & Son, Ltd., have a vacancy for an experienced Warehouseman in their Export department. Apply, by letter only, stating age, experience, and salary required, to "E. J. M.," 35/42 Charlotte Street, E.C.

SITUATIONS OPEN

(Colonial, Indian, and Foreign).

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid. Replies addressed to this office will be forwarded to the advertiser for an additional charge of 6d.

BOMBAY, India.—Qualified Assistant wanted for prominent English firm of Chemists to take charge of the Laboratories and supervise Soda-water Factory; salary offered is as follows:—Rs. 350, Rs. 375, Rs. 400, and Rs. 425 per month, without quarters, for four years' agreement; second-class passage paid and return passage paid on completion of agreement. Apply, with full particulars of experience, to "T. C. L." (173/5), Office of this Paper.

BURMA.—Required, Manager; qualified man; single; between 30 and 35 years; abstainer; 4 years' agreement; passage paid out and home; salary Rs. 500 per month and bonus. Send particulars to 51/60, Office of this Paper.

CAPE TOWN.—Qualified Assistant; single; about 25 years of age; good Dispensing experience; 3 years' engagement; £15, £16, and £17, bedroom found; second-class passage paid out. Apply, with copy testimonials, to 51/60, Office of this Paper.

CAPE TOWN.—Qualified Assistant required; salary £20 month; age about 26; passage paid. Please apply, "R. L.," c/o S. Maw, Son, & Sons, 7 to 12 Aldersgate Street, E.C.

CAPE TOWN.—Required urgently, a good qualified Junior Assistant; single; second-class passage paid out; salary £15 per month first year, £16 per month second year, £17 per month third year; sleeping accommodation provided; must be neat and accurate Dispenser. Apply, 39/51, Office of this Paper.

CEYLON.—Qualified Assistant (Minor) wanted for Ceylon; 23 to 25 years of age; single; good Salesman; pleasant address; Optics an advantage; 4 years' agreement. Apply, giving full particulars, to 51/2, Office of this Paper.

JAPAN.—A thoroughly capable, gentlemanly, young man, about 25, qualified, required for a first-class English Chemist's in Japan; 5 years' agreement; passage paid out and home, and liberal terms to suitable candidate. Apply, with full particulars of previous experience, to 20/37, Office of this Paper.

NATAL.—Required immediately, qualified Assistant, age about 24 to 28; 3 years' agreement at £18, £19, and £20 per month; passage paid out, with £5 expenses en route; total abstainer; excellent references required. Apply, 37/15, Office of this Paper.

SINGAPORE.—Wanted at once, a young qualified Chemist, unmarried, age 23 to 28, to take entire management of Chemist's shop in Singapore (Limited Company); must understand stock and other accounts; salary £300; 5 years' agreement; first-class passage. Apply by letter, enclosing stamped addressed envelope, to "E. G.," 75 Chelverton Road, Putney, London, S.W.

WANTED, Straits Settlements, Assistant, qualified, about 23 to 25, with good knowledge of Photography and Optics and good all-round experience; 4 years' agreement; salary £245, advancing to £335; free rooms and medical attendance; passage paid out and home. Apply, with full particulars, to Dakin Brothers, Ltd., 82 Middlesex Street, Bishopsgate, London.

SITUATIONS WANTED.

1s. for 12 words or less; 6d. for every 10 words or less beyond, prepaid.

NOTE.—Replies can be addressed to this office and forwarded to the Advertiser for an Additional charge of 6d.

[HOME]. RETAIL.

AS Manager (40), married, qualified, with view to succession or purchase on easy terms; good-class Dispensing and Family business with scope for side-line departments preferred. Elwell, 6 Burleigh Road, Enfield, Middlesex.

AS Manager; 41; high-class Store; Photography, Optics, Dispensing, etc. 169/16, Office of this Paper.

ASSISTANT; 22; disengaged; good Counterman, Dispensing, Photography; London only; can give personal interview. "Xaxa" (169/13), Office of this Paper.

AS Branch Manager or Assistant; young gentleman; well educated; unqualified; all-round experience; height 6 ft. 1 in.; good address; excellent references; would not object to Dispensing or Laboratory work. J. C. Holland, 27 Kimbolton Avenue, Nottingham.

ASSISTANT or Manager; over 20 years' experience; really capable all-round man; good appearance; steady; interview by appointment; disengaged in few weeks; outdoors. "Dens" (169/8), Office of this Paper.

ASSISTANT; 24; 9 years' experience; Liverpool district preferred, but not essential; can Extract and not afraid of work. 169/24, Office of this Paper.

ASSISTANT; unqualified; 21; good country and suburban experience, Agricultural, Dispensing, and Photographic; good references; outdoors preferred; disengaged. Sharman, c/o Lasham, Romford.

ASSISTANT; middle-aged; good Prescriber and Salesman. "Magnes," 18 Bryan Street, Islington, London, N.

ASSISTANT (21) requires situation in country town with good train service to Manchester; easy hours to facilitate studying; 7 years' thorough training with busy up-to-date Retail, Dispensing, and Photographic business; capable Window-dresser, Dispenser, and Counterman; disengaged October 12. Harrison, Laund, Nelson.

ASSISTANT; 34; single; all good-class Retail experience, City and West End; very good Dispenser; salary about 35s. outdoors. "Central," 36 Beach Road, Southsea.

ASSISTANT; 39; disengaged; experienced; references; single; Dispenser. Dale, 11 Park Lane, Clissold Park, N.

ASSISTANT (27), unqualified, seven years' experience, excellent references, requires Situation 172/31, Office of this Paper.

ASSISTANT; 25; competent Dispenser; Window-dresser; Photography; unqualified; disengaged. Cyanide, 53 Nightingale Lane, Hornsey.

AT liberty; Locum; qualified; 29; first-class experience. "Chemist," 47 Elder Avenue, Crouch End, N.

BOURNEMOUTH.—Gentleman desires situation in Bournemouth as Senior or Dispensing Assistant; unqualified; first-class West-End experience and highest references; capable of taking entire charge. Address "Permanency" (157/39), Office of this Paper.

BOURNEMOUTH District.—Senior Assistant; unqualified; good Dispenser, Counterman, Photography; capable of taking entire charge; first-class experience. "Dianol" (169/20), Office of this Paper.

BRANCH Manager or Doctor's Dispenser; Minor and Hall qualifications; in business own account 20 years; single; steady; honest; moderate salary; outdoors; can wait a few weeks. "W. H. M.," 10 New Park Street, Blackburn.

BRANCH Manager or unqualified Assistant; Prescriber, Dispenser, Extractor; Gas or local Anaesthetics; competent Salesman; good references; moderate salary; abstainer; married; permanency. 167/17, Office of this Paper.

BRANCH Manager, Senior, or Locum; 30; qualified; 14 years' varied high-class experience, Dispensing, Prescribing, Photography, London (West End) and provinces; disengaged 27th; abstainer; good references. Tavenor, Stourton House, Queen Street, Lynton, N. Devon.

CHEMISTS in Preston and Blackpool, Dispenser, two years' experience, will give his services free on Saturday evenings. 165/38, Office of this Paper.

COMPETENT man, (age 27) seeks situation in Laboratory; 11 years' previous experience in Pharmaceutical and Speciality Preparations. Lee, Nine Springs, Hitchin, Herts.

COMPETENT Assistant; West End and suburban experience; unqualified; S.E. or S.W. districts preferred; Photography; outdoors. "Statim," 198 Rye Lane, Peckham, S.E.

CONTINENTAL Qualified Assistant (30), smart appearance, fluent French, German, Italian, well up in English, seeks immediate Situation. "Switz," 18 Eccleston Street, S.W.

DENTIST-PHARMACIST (registered), married, middle-aged, desires Managership. "Chemden" (171/14), Office of this Paper.

DISENGAGED; Locum or permanency; 37; thoroughly sound all-round experience. "Extractor," 40 Dalryell Road, S.W.

DISENGAGED September 30; unqualified; 25; tall; married; take charge; permanency; competent and reliable Dispenser and Counterman; nearly 12 years' all-round experience. "Chemicus," 25 Thanet Road, Margate.

DISENGAGED; Assistant; competent, reliable; good experience, Counter, Dispensing; smart. "Statim," 60 Lancelot Road, Wembley, N.W.

DISENGAGED, Assistant or Locum; any period; competent, reliable, experienced. "Chemicus," 69f Station Road, Camberwell.

DISENGAGED; reliable Locum; good practical worker; not Photographic; abstainer; 50; excellent references; unqualified. "Chemicus," 19 Chapel Street, Uxbridge.

DISPENSER (Lady); Apothecaries' Hall; Hospital and Shop experience. "Locum Dispenser," Poplar Hospital, London, E.

DISPENSER; situation wanted in London; 12 years' experience in Doctor's surgery; bookkeeping, typewriting; age 30; excellent reference. Edwards, 52 Harker Street, S.W.

DISPENSER, Locum or permanent; Nurse desires post, Doctor or Institution; willing to help in Surgery; Hall qualification; good references. "E. E. A.," Hospital, Bridgnorth, Salop.

DISPENSER (Hall) desires post; Doctor or otherwise; good London and country experience; London preferred. 167/29, Office of this Paper.

DISPENSER (Hall) desires position, Doctor or Institution; good London and country experience; excellent references. 148/21, Office of this Paper.

EVENINGS (any) from 6.30; good all-round English and foreign experience; 26; tall. "Vesper," 38 Margate Road, Brighton.

EVENINGS, from 7 P.M.; unqualified; West-End experience; Dispensing and Counter. 172/15, Office of this Paper.

J. PYE, 62 Lynette Avenue, Clapham Common, disengaged from September 20.

JUNIOR (20) requires situation October; excellent references; Photography; London, S.W., preferred; time for evening classes. "Cornwall," c/o Martin, 104 Pretoria Road, Streatham, London, S.W.

JUNIOR (20) requires situation; London preferred; disengaged end of month. Alexander, 27 Rodney Road, Great Yarmouth.

JUNIOR, age 20, 6 years' experience, desires change; good Counterman and careful worker; excellent references. Apply. 51/73, Office of this Paper.

JUNIOR requires good situation; 4 years' experience, Counter, Dispensing, and Photography; excellent references. "C. H. J.," West Lynne, Felixstowe.

JUNIOR; 4 years' experience in London and country; knowledge of Dispensing and Photographic; 7½ hours and salary (indoors or outdoors); age 22; height 5 ft. 6 in., to "Chemist," Birch Ville, Norfolk Road, Maidenhead.

LADY Dispenser, Hall, 3 years' experience, requires post with Doctor or Institution. Apply, with particulars, to Miss Selson, Cedar Cottage, CalKow End, Worcester.

LADY Dispenser; Hall qualification; Locum or permanency. K. Robinson, North Wingfield, Chesterfield.

LADY Dispenser (Hall); experienced, careful, reliable; bookkeeping. 2 Selwyn Road, Upton Manor, E.

LADY Dispenser; private. Hospital. Club experience; highest references; free October 5. 168/32, Office of this Paper.

LIVERPOOL district; 24; tall; 9½ years' high-class Counter, Dispensing, Photo; unqualified; expert; disengaged September 30. 169/6, Office of this Paper.

LOCUM or otherwise; qualified; good references; disengaged 1 October. Arthur Taylor, 158 High Street, Harborne, Birmingham.

LOCUM or permanency; 24; disengaged; unqualified; references. Leuan, 29 Keswick Road, Blackpool.

LOCUM; Relief Manager; experienced, reliable; highly recommended; disengaged 25th inst.; town or country. "Squill," 33 High Street, Marlow.

LOCUM; disengaged; unqualified; 4 years in last situation; splendid references and testimonials; trustworthy; abstainer. Reynolds, 25 Burges Road, East Ham.

LOCUM or Part-time; first-class experience; disengaged. "Dispenser," 13 James Street, Paddington, W.

LOCUM or Manager; qualified; Midlands preferred. "Pharmacist," The Cottage, Dover Street, Bilston.

LOCUM Tennens, Part-time, or Manager; elderly; qualified; varied experience; good references. W. P. Swift, 65 Patmos Road, Brixton, London, S.W.

LOCUM; disengaged September 30; highest references; wide experience, North and South. 53/73, Office of this Paper.

LOCUM or permanent; qualified; tall; 39; all-round experience; town and country; good address. Longman, 17 York Chambers, Adelphi.

LONDON.—Young man, with general Wholesale and Druggists' Sundries experience, requires trial on Retail Drug Sundry Counter; good references. "Confident," 8 Buer Road, Fulham, S.W.

LONDON.—Time for attending lectures; good references; age 23. State full particulars. "Rowland," c/o Smith, Chemist, Newark.

LONDON.—Qualified Assistant (24), excellent experience and references, good appearance, desires situation in City or West End; disengaged about end of October. "Scot," 24 Lady Margaret's Road, N.W.

LONDON; Stockkeeper, Warehouseman, assist Counter; age 28; well up in Drugs and Sundries; some Photography; life experience; best references; disengaged. 166/40, Office of this Paper.

MAN; 36; good General Working Foreman; hard worker, organiser, and economiser; could travel. "Energy" (172/4), Office of this Paper.

MANAGER or otherwise; married; unqualified; competent; highest references. "H. C. B.," 43 Union Road, Borough, London, S.E.

MANAGER; qualified; 28; Scotch; single; up-to-date experience; Counter, Dispensing, and Window-dressing; sober habits, energetic, thoroughly reliable, and undeniable references; seeks permanency. "Five" (53/58), Office of this Paper.

MANAGER or Senior, with view to succession; 33; best West End experience; disengaged very shortly; well recommended. "Alpha" (172/25), Office of this Paper.

MANAGER; qualified; good experience; good Prescriber and Counterman; age 33; London preferred. "F. W.," 64 St. John's Road, Oxford.

MANAGER or position of trust; unqualified; thoroughly competent worker; excellent Prescriber, Counterman, and Window-dresser; highest references; London preferred. "W.," 94 Tabernacle Street, E.C.

MANAGER; view to succession; abstainer; qualified; country or town; good references; reliable; trustworthy. "E.," 138 Holloway Road, London, N.

MANAGER seeks re-engagement; permanency; 61 years' reference last two situations; age 35; married; tall and good appearance; London preferred. "Ph.C.," 91 Temple Road, Cricklewood.

MANAGER; 35; qualified; excellent references; good London (City, W., S.E.) and provincial experience. "Chemist," 81 Revelstoke Road, Southfields, S.W.

MANAGER or Senior (33) in City or West End; first-class West-End and Store experience. "Pharmacist," 39 Avondale Road, Palmer's Green, N.

MANAGER; qualified; 29; first-class experience. "Chemist," 47 Elder Avenue, Crouch End, N.

MANAGER; 38; unqualified; tall; married; disengaged; experienced. Thornton, 15 Studley Road, Forest Gate.

MANAGER; temporary or permanent; steady, reliable, energetic; good all-round experience; good references; moderate salary. "Chemist," 1 Egerton Grove, Stretford Road, Manchester.

MANAGER or Senior; qualified. "S.," 8 Moss Hall Villas, Ballard's Lane, N. Finchley, N.

MANAGER (34), married, experienced Dispensing, Counter, Photography, excellent references (six and three years', etc.), desires permanency. "Qualified," c/o 12 Marine Parade, Clacton-on-Sea.

MANAGER or Locum; qualified; married; age 36; experienced. Gardam, 389 High Street, Cheltenham.

MANAGER; qualified; 41; excellent London experience; 15 years' present reference. "Ajax," 28 Silver Crescent, Gunnersbury, W.

MANAGER; qualified; elderly; single; good references; moderate salary; disengaged. 169/18, Office of this Paper.

MANAGER; qualified; young; married; highest references; provinces or seaside preferred. 169/23, Office of this Paper.

MANAGER, qualified (31), with good all-round experience, desires permanency (outdoors) with prospect of advancement, or Partnership in good business. 170/1, Office of this Paper.

MANAGER; qualified; married; age 35; 18 years' first-class experience; excellent references; Extractor. Mitchell, 58 Great Norbury Street, Hyde, Cheshire.

MANCHESTER preferred; open for engagement; qualified; age 34; reference. S. T. Thompsu, c/o Dowson's, East Parade, Colne, Lancs.

PART-TIME, two days a week and Friday and Saturday at 4 P.M.; good references; terms moderate. "Rhei," 309 Euston Road.

PERMANENCY, with or without view to interest in brisk business; qualified; single; town or country. "Fidelity" (168/52), Office of this Paper.

PHARMACIST, at liberty September 23 to 28. Howell, 87 Pontcauna Street, Cardiff.

PHARMACIST, elderly, is open to an engagement as Dispenser, or light duties; London. "Statim," 416 Mare Street, Hackney.

QUALIFIED; 33; tall; abstainer; early October; Partnership or view succession entertained. "Lithia" (172/18), Office of this Paper.

QUALIFIED; 26; experienced; Counter and Dispensing, Photography; outdoors preferred. Rees, 105 Church Road, Hove.

QUALIFIED; 28; excellent London and provincial experience; outdoors. Lockhart, 1 Boyne Road, Lewisham.

QUALIFIED; Manager or Senior; permanency; good all-round experience; undeniable references; Brighton or other South Coast town. 169/7, Office of this Paper.

QUALIFIED; single; brisk business; varied experience; any locality; disengaged. "Permanent" (168/25), Office of this Paper.

QUALIFIED man seeks permanency; brisk up-to-date business; good Window-dresser; Photography; smart Counterman and Prescriber. Swanson St. John's, Worcester.

QUALIFIED Manager; Locum or permanency; exceptionally business; London or suburb. "H.," 42 Tavistock Crescent, W.

QUALIFIED (27), 8 years' Store experience, desires change; tall. Apply, 167/5, Office of this Paper.

QUALIFIED competent woman Dispenser wants evening work; likes Cash Surgery work; makes Preparations. "R. W.," 43 Brighton Road, Stoke Newington.

QUALIFIED Manager; Locum or permanency; exceptionally good all-round experience; satisfactory references; reliable, trustworthy; disengaged. "Aspirin," 238 Derinton Road, Tooting, S.W.

SEASON; Locum or permanent; Photographics; Optics; Prescriber; 12 years' London, Continent, country; Parle français; energetic. "Chemist," Maple House, Gosberton Risegate, Spalding.

SENIOR Assistant; disengaged; reliable and trustworthy; experienced in all branches of the trade; unqualified; married; permanent or temporary. "Bonus," 571 Chesterfield Road, Woodseats, Sheffield.

SMART Senior Assistant; disengaged October 7; good business training; modern high-class Stores given preference; salary 59s. weekly and commission; first-rate references; can control staff. "R.," 8 Bassett Street, Kentish Town, London, N.W.

TEMPORARY; thoroughly experienced; smart. Gibson, 115 Scott Ellis Gardens, St. John's Wood.

UNQUALIFIED Assistant or Branch Manager; disengaged; single; country preferred, but not essential; steady, reliable; moderate salary; good references; Prescriber and Extractor; used to Mixed business. Please state full particulars in first letter, White, Oxford House, Ashmore Road, King's Norton, Birmingham.

UNQUALIFIED; Manager or Assistant, with or without view to succession; age 37; tall, smart appearance, and address; sound all-round experience; Extractor; married; life abstainer; town or country. "K." (172/28), Office of this Paper.

UNQUALIFIED (23), with good experience, disengaged. Lemon, 5 Birch Grove, West Acton.

YOUNG gentleman requires situation as Assistant (outdoors) in a good-class Dispensing business with a view to a permanency; country preferred; age 25 years; married. Apply, 172/26, Office of this Paper.

WHOLESALE.

Trade circulars, samples, and printed matter can in no case be forwarded.

A **QUALIFIED** Chemist and proved Salesman, calling on Doctors in Lancashire and the West Riding, wishes to Represent on commission a good firm doing business with Chemists in that area. Reply, 168/39, Office of this Paper.

ADVERTISER, with wide experience in London, Wholesale, Retail, and Traveling, seeks position in a good London Wholesale or Retail house. "H.," 73 Mildmay Grove, N.

GENTLEMAN (39), tall, well known South, East, and West of England and Wales, will shortly be open to Represent first-class house. "Phenol" (166/39), Office of this Paper.

LABORATORY Assistant Foreman; 24; has had first-class experience in Chemicals and Proprietary Articles. "H. D.," 12 Marcia Road, Old Kent Road, S.E.

PHARMACIST, tall (34), engaged in Hospital, desires berth as Representative; Therapeutical knowledge. 170/11, Office of this Paper.

POSITION as Invoice Clerk to Wholesaler; 24; 9 years' experience. "Omega" (167/34), Office of this Paper.

QUALIFIED Chemist (young) desires position in Wholesaler's Laboratory, or as Representative. 169/21, Office of this Paper.

REPRESENTATIVE; smart; 25; good connection Midlands, South Coast, West England, and Wales; Drugs, Sundries, or Speciality; disengaged. Write "Commerce" (170/26), Office of this Paper.

REPRESENTATIVE (33) seeks berth; single; abstainer; highest credentials; London and provincial experience; Essences, Essential Oils, Perfumery, Toilet Requisites. "Success" (172/2), Office of this Paper.

TOILET Preparations and Perfumery; experienced, young, married, qualified; excellent references; Home or Abroad. 169/203, Office of this Paper.

TRAVELLER, with good connection Scotch Chemists, open to Represent Sundry house; disengaged October 1. 157/28, Office of this Paper.

TRAVELLER, calling upon Doctors, Chemists, etc., N.W. Counties, desires to Represent additional house to work in conjunction with present house; part expenses and commission; successful interviewer; highest references. "Phenol" (169/31), Office of this Paper.

TRAVELLER, with good connection in Scotland and part of Ireland, wishes to Represent additional house. 170/12, Office of this Paper.

SITUATIONS WANTED

(Colonial, Indian, and Foreign).

1s. for 12 words or less; 6d. for every 10 words beyond, prepaid. Replies addressed to this office will be forwarded to the advertiser for an additional charge of 6d.

This heading is reserved for assistants seeking situations in the British Colonies, India, and Dependencies or elsewhere abroad.

QUALIFIED English Chemist, 14 years' Retail experience, desires position as Manager or Assistant in the Colonies. 170/100, Office of this Paper.

RIVIERA Season; qualified; 26; high-class Dispensing and Counter experience. 54/5, Office of this Paper.

MISCELLANEOUS.

MACADAM & TUCKNISS, Sharedealers, Bank Chambers, Blackheath, S.E. Established 1898. Telephone 81 Lee Green.

SHARES FOR SALE (free of commission, subject).—200 W. B. Fordham, 11s. 9d.; 200 Idris "A" 5 per cent. Preference, 4s. 9d.; 100 Lewis & Burrows Ordinary, 2s. 9d.; 100 Parke's Drug Preference, 11s. 4d.; 200 International Sponge 6 per cent. Preference, 13s. 10d.; 50 New Transvaal Chemical, 51s. 3d.; yearly dividends 25 per cent. last 7 years.

WANTED (subject).—100 Barclay Ordinary, 2s. 1½d.; 50 Wright Layman Preference, 20s. 10d.

List of Shares for Sale and Wanted sent free on application. Every effort made to effect business for Buyers and Sellers in all Stocks and Shares. Bankers, London and County and Westminster.

ELATERIUM.—For Sale, 50 to 60 lb. of Elaterium, delivered free London or any other place in Great Britain and Ireland. Apply, directing offers, to "Pharmacist" (170/39), Office of this Paper.

WANTED to Purchase.—A Firm of Manufacturers of Inks, Gums, Pastes, and many other domestic and office requisites are open to consider purchasing outright, or manufacturing and exploiting for proprietor on royalty or commission, some other Proprietary or Patent of merit and utility; special facilities for manufacturing and packing and for exporting to all parts of the British Empire; all correspondence in strict confidence. The Manufacturing Co., 2 DeLamere Street, Chester.

SECOND-HAND CHEMISTS' FITTINGS.—We have an exceptionally fine selection of these in all sizes; prices are right and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO., 262 Old Street, E.C.

CHEMISTS' SHOPFITTINGS (second hand).—Ranges Mahogany Drawers, Bevelled Edged, Glass Labels, Cut-glass Knobs, Shelving, Lockers; Mahogany Dispensing-screens; Glass-fronted Counters; Piano-fronted Wall-case, Mirror Centre; Bent Front Counter-cases; Desks; complete Shop-rounds, Window Backs, Glass Shelves, etc.; extensive stock; give-away prices; high-class Fittings, bang up to date; Estimates. D. MATTHEWS & SON, 14 & 16 Manchester Street, Liverpool.

CHEMISTS' Shopfittings.—Window Enclosures, Showcases, Silent Salesman, Dispensing Screens, Wall-cases, Perfume-cases, Glass-front Serving Counters, Drug Drawers, Counter Drawers, second-hand, shop soiled, at unbeaten prices; you can't do better; 30 years fitting Pharmacies. Send for free estimate, George Cook, The Working Shopfitter, 30 Buttesland Street, East Road (near Old Street Tube Station).

CHEMISTS' SHOPFITTINGS (second-hand).—Very large quantity of Wall Fittings, Showcases, Dispensing Screens, Perfume-cases, etc., etc., to clear for cash; great bargains; call and view, or send sizes of what you require; these goods must be sold. PHILIP JOSEPHS, 93 Old Street, Goswell Road, London, E.C.

CHEMISTS' FITTINGS (bargains).—16-ft. Drugfitting, mirror Poison Cupboards, Cornice complete, £14 10s.; Mahogany Plate-glass Wall-case, 10 ft., £13 10s.; Mahogany Plate-glass 7-ft. Dispensing-screen, bevelled mirror centre, £5; Serving Counter, 12 ft., Glass Doors, Mahogany Top, £7 10s.; Nests of strong Counter Drawers, from 27s. 6d.; Mahogany and bent Plate-glass Counter-cases, 4 ft. 75s., 5 ft. 87s. 6d., 6 ft. 97s. 6d.; all goods as new. Send for sketches to H. Mills, Chemists' up-to-date Shop-fitter, Shop Front Builder, Steam Works, 163-5 Old Street, E.C.

OPTICAL DIPLOMAS.

Experienced and successful coaching for the S.M.C. and E.O.A. Examinations by correspondence and personal tuition. Success guaranteed in a few months by our method to students willing to work hard. Reasonable terms based partly on results. Apply Secretary,

DIOPTRIC ASSOCIATION, 25 & 26 Hart St., Holborn, W.C.

CHEMISTS' TICKETS!

F. MERTEN & CO. Advise all Chemists (before placing their orders) to write for Samples of their —
MOST SELECT, EFFECTIVE, & CHEAPEST WINDOW TICKETS OBTAINABLE; also a Specialty of theirs is the production of Display Figure-Sketch Cards, portraying various ailments, etc.

Write at once—72 MARLBOROUGH RD., UPPER HOLLOWAY LONDON, N., to obtain satisfaction.

BERNARD SLACK IS RECOVERING

from his critical illness and though not yet able to walk far, can manage all other work. Great improvements next month in system, double value for same fee. Half yearly instead of yearly interviews. Expert training, assistance &c. Get Booklet free now.

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is essential to the Pharmacist. Start now. Send 1d. Stamp and I will send you in confidence samples of my new scheme. This offer is open to pharmacists only. Booklet, "How to Increase Your Business," post free. A South Coast Pharmacist writing, states:—"So many of your ideas and suggestions are excellent; I appreciate them."

BILLYARD ALLISON, Pharmacist & Business Specialist, RETFORD.

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will not claim to be exempted from paying his contributions under the National Health Insurance Act. To do so is against his interests, present and future. Send stamped addressed envelope for advice on this and other points to

The MANAGER, CHEMISTS' FRIENDLY SOCIETY (Approved),
194 St. Vincent Street, GLASGOW.

**THYROIDS, PITUITARIES, OVARIES,
SUPRARENALS, PROSTATES, &c.,**

— OF —

SHEEP, OX, and PIG.

Before giving your orders for the above **Animal Substances**, you will save much money by writing for quotations, to No. 22/31 Office of this Paper.

EXCHANGE COLUMN

One halfpenny per word with name and address. One penny per word if we register the address and attach a number.

No advertisement inserted for less than 6d.

FOR DISPOSAL.

APPARATUS.

BENNETT'S automatic water still, cheap. 167/73, Office of this Paper.

SODA-WATER machine by Loze, good condition, with filter; makes its own gas; boy can fill 3 doz. per hour; price £12 10s. **MILLING-JOHNSON, LTD., Chemists, Chester.**

DENTAL

DENTAL bracket table, 13s.; portable gas, 15s.; rubber clam outfit, workroom tools, etc. **BARRINGTON, 4 Southwark Bridge.**

PROPRIETARY ARTICLES.

THREE gross Spiralettes (this season's), 4s. 6d. gross, post paid; Woods' peppermint cure, 2 doz. 13½d., 4 only 2s. 9d. for 28s. **PARKER, Uttoxeter.**

CATTLE oils (Chapman's); 23 2s., 12 2s. 6d., 1 5s. 6d. size; best offer, carriage paid. **CALVERT BROWN, Westborough, Searborough.**

WHAT offers? two 2s. 3d. Capsuloids, 2 Perry Davis pain-killer 1s. 9d., 2 Balm Gilead 13½d., 3 7½d. Frog Throat, Stuart's catarrh tablets 13½d., 2s. 3d., 1 each Harvey's red lotion, Woodcock's gout pills 13½d., Mosquera beef jelly; all clean goods. **BAKER, Chemist, South Shields.**

SHOP FITTINGS.

MAHOGANY counter cases, shop-soiled. **AYRTON, SAUNDERS & Co., LTD., Liverpool.**

WANTED.

J.R.E. wanted. **JOHN ILL, Chemist, Oxford.**

BEARD'S oxygen and hydrogen regulators, also hydrogen gauge; must be in perfect order. **CLEAR, Chemist, Leicester.**

OPTICAL books; Minor, Major, Chemists' books; send prepaid for valuation; cash offers per return. **GOWER, Bookseller, Waterloo, Liverpool.**

WANTED, for doctor's surgery, assorted shop-rounds, shelving, pill-boxes, label-drawers, surgical dressings. 168/15, Office of this Paper.

WANTED, Stephen Smith's 6 per cent. cumulative preference shares; state quantity. "M.P.S." c/o Spurr, Pharmacist, Huddersfield.

OXYGEN cylinders, also "Bulletin of Pharmacy," "Spatula," and other American drug journals, current or back numbers. State price, particulars, **MILLING-JOHNSON, LTD., Chester.**

WANTED, Newth's "Inorganic Chemistry," Perkin and Kipping's "Organic Chemistry," Southall's "Mat. Med." Lowest prices, "W. P. S. F.," 5 Cadbury Road, Moseley, Birmingham.

WANTED, mahogany fittings: must be good, modern, and cheap; glass-fronted counter; 14-ft. run drawers, with glass labels, shelving, and cornice above; dispensing screen; shop rounds. **BRIELEY, Chemist, Middleham, Yorks.**

SHOPS ACT, 1912.

THE Section 4 notice-card (size 14 in. by 11 in.) required by chemists who serve customers with medicines and medical and surgical appliances after 1 p.m. on early-closing days can be obtained from the offices of the **C. & D., 42 Cannon Street, London, E.O.**, for 3s. 6d. per dozen, or 8d. for two delivered free.

RUSSIAN NEWS.

RUSSIAN PLATINUM.—In consequence of the Bill passed in June last by the Russian Imperial Government in order to protect and regulate the platinum industry in Russia, the interested parties have decided to hold a meeting shortly at Ekaterinburg to discuss the measures to be taken for the development of the home industry and to deal with the question of taxes which will be levied by the Imperial Treasury on the production of the metal. The new Bill is apparently intended to ensure a strict control of the industry, the exportation of raw platinum being prohibited, while additional refining facilities will be provided for. The measure is also intended for the repression of frauds, thefts, etc.

RUSSIAN NAPHTHA.—Owing to the steadily decreasing production of naphtha in the Baku district, the price has advanced considerably. Recently it has been customary to insert in contracts a clause to the effect that half of the difference due to any advance in the market price which may occur between the conclusion of the contract and the actual date of delivery shall be borne by the buyer. Stocks in the Caucasus are reduced to a minimum. The yield of naphtha in the Baku district during the first six months of 1912 amounted to 204,300,000 pounds, compared with 214,900,000 pounds in the corresponding period of 1911 and 240,300,000 pounds in 1910. The reason for this decline in production is attributed to the pressure of water in those springs which have necessitated deep boring operations. [1,000 pounds=16 tons (about).]

RUSSIAN CHEMICAL INDUSTRY.—The Russian chemical industry, says the British Consul at Odessa, came into existence when the present protective policy was adopted thirty years ago. The output in Russia is valued at about 15,883,000/ per annum. The principal products are inorganic acids and salts, gunpowder, paints and lacquers, organic dyes, and superphosphates. The chief chemical factories are mostly situated close to the chief industrial towns, and are consequently remote from the regions which produce the raw materials. This has often caused the importation from abroad of the raw material, which, being carried by sea, was found to cost less. In many lines, such as sulphuric and other acids, soda, and bleaching-powder, home manufacturers monopolise the Russian market. The production of sulphuric acid will probably show great increase in the near future.

RUSSIAN ALCOHOL.—The Russian alcohol industry, in spite of the increased and bounty-fed exports, suffered from over-production during 1911. Over-production took place in the south-western, the central industrial, and the Little Russia provinces, and it was partly due to the fact that every year more alcohol is left over from the sugar production. This being the case, every growth of the sugar production is followed by a corresponding growth of the production of alcohol. To sell this production in a denatured form for industrial purposes, for burning in lamps and for cooking purposes, etc., sounds most simple. Many advocate the use of alcohol in cooking, since it is free from smell and smoke. But cheap as this alcohol is, petroleum is still cheaper and more efficient, because it gives quicker results. Clearly alcohol, says the British Consul at Odessa, has not found as yet its most perfect and economic apparatus for combustion, and this seems to be felt here. The exports from Odessa during 1911 were 5,874,141 pf. gals., against 4,637,312 pf. gals. in 1910 and 3,938,295 pf. gals. in 1909.

MUNICIPAL PHARMACIES IN RUSSIA.—The U.S. Consul, in a report on Russian commercial notes, has the following remarks in regard to municipal pharmacies, to which reference was made in the *C. & D.*, 1912, I., 698:

American manufacturers and exporters of drugs and other articles found in drug-stores may profit by the law of February 1912, which provides for the opening of pharmaceutical establishments by municipalities and zemstvos. Hitherto the Russian drug-business has been carried on by a limited number of private individuals who enjoyed a practical monopoly. A town council had the right to open only one pharmacy, and individuals who had acquired the

rights to open such stores were able to sell these rights for large sums. At the city hospitals and those of the zemstvos medicine always has been given out free. Under the new law, which was brought about by the necessity for providing the large number of poor people in Russia with medicines at low rates, municipalities may open pharmacies without regard to existing private ones. The number of private drug-stores in a city is proportionate to the number of its inhabitants. In Moscow there can be one drug-store for every 12,000, and in provincial cities for every 7,000 inhabitants. In 1911, while there were about 6,000 private pharmacies there were but 39 town pharmacies with the free right of sale, and two-fifths of these town pharmacies were leased out. The Moscow town council is preparing to establish a number of drug-stores throughout the city. It is reported that St. Petersburg is doing likewise, and that \$400,000 has already been voted for the opening of twelve municipal pharmacies in the course of six years.

COMING EVENTS.

This section of the "*C. & D.*" is reserved for advance notices of meetings or other events. These should be sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Monday, September 23.

The National Union of Assistant Pharmacists, Thatched House, Essex Road, N. Committee at 8.30 P.M.; general meeting 9.30 P.M.

Tuesday, September 24.

Bradford Pharmacists' Association, Chamber of Trade, 9 P.M.

Wednesday, September 25.

North Kent Pharmacists' Association, Town Hall, Gravesend, at 4 P.M. Annual meeting.

Manchester, Salford and District Chemists' Assistants' Association.—Lantern-lecture on "The Commerce of Drugs," by Professor H. G. Greenish, Chemical Lecture Theatre of the University (Oxford Road entrance), at 8.30 P.M.

Thursday, September 26.

North London Pharmacists' Association, Northampton House, St. Paul's Road, Highbury Station, at 3.30 P.M. Address by Mr. W. J. U. Woolcock on the Insurance Act and other trade matters.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—Opening of the seventy-first session of the School of Pharmacy on October 2, at 3 P.M. Inaugural address by Mr. J. Rymer Young.

ST. VINCENT ASSOCIATION's seventh annual dinner at Anderson's Hotel, Fleet Street, London, on Thursday, October 3, at 7.30 P.M. Tickets 5s., from the Secretary, Mr. J. R. Bailey, 13 Devonshire Square, E.C.

Synthetic Sentences.

The following sentences are made up of words selected from the advertisements in the "C. & D. Diary, 1912."

To increase your trade and retain an unrivalled business it is essential to sell the best.—*W. E. Rowson (Mandalay)*.

THE CHEMIST AND DRUGGIST is the book for me, from which I hope to make l. s. d.—*Albert Pellew (Old Kent Road, S.E.)*.

Change your show-window often. The more frequent the change, the more goods you will sell.—*James A. Biggart (Tobago, B.W.I.)*.

A reliable and essential guide to all chemists and druggists is *The Chemists' and Druggists' Diary*.—*Joseph F. Nelson (Trinidad, B.W.I.)*.

Every pharmacist seeking to keep up with the times should study THE CHEMIST AND DRUGGIST carefully.—*F. James (Cheshunt, Herts.)*.

Extract from a business firm's diary: "Successes come not by 'weights,' but by smart advertisement writing."—*E. J. Anderson (Liverpool)*.

For latest business information and all drug-trade matters pharmacists should read THE CHEMIST AND DRUGGIST.—*Walter Ernest Flenley (Liverpool)*.

King and Queen, physician, pharmacist, connoisseur, amateur, bishop, and layman welcome this delightfully charming world-renowned *Diary*.—*J. Douglas Watson (Edinburgh)*.

"Home" Window Display Competition for 1912.

WE ALLOW A FINE PROFIT ON

WRIGHT'S COAL TAR SOAP

to those who help us IN ADVERTISING IT.

Why not have part of the profits that must otherwise go to the Newspaper Proprietor?
We prefer your active co-operation, for *you* and *we* can thus estimate ACTUAL RESULTS.

A WINDOW DISPLAY OF WRIGHT'S COAL TAR SPECIALITIES YIELDS 30 PER CENT. PROFIT.

on the selling price, or 46 per cent. on the buying
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FOURTEEN CASH PRIZES

WHICH WILL BE GIVEN FOR WINDOW DISPLAYS IN 1912.

First Prize, £25 ; Second Prize, £15 ; Third Prize, £10 ; Fourth Prize, £5 ;

And 10 Consolation Prizes of £1 each.

Colonial Window Display Competition for 1912-13.

In addition to the Valuable Prizes offered for Window Displays in the United Kingdom we offer the following for

AUSTRALASIA AND ALSO SOUTH AFRICA
(For 1912-13)

For Photographs of Window Displays for 1 month of 3 gross of tablets (with which a bonus of 6 doz. tablets is given, and a full range of show material) the following Prizes are offered :

Australasia

First Prize - - **£10**
Second „ - - **£5**
Third „ - - **£2**
5 Consolation Prizes of **£1** ea.

Write at once to Agents :

F. KEMP & Co., Ltd.,
22, Young Street, SYDNEY.

Photographs must reach
WRIGHT, LAYMAN
and UMNEY, LTD.,
Southwark, London,
England, before
March 31st, 1913.

South Africa

First Prize - - **£10**
Second „ - - **£5**
Third „ - - **£2**
5 Consolation Prizes of **£1** ea.

Write at once to Agent :

Mr. GEO. SCHACHNA,
P.O. Box 944, CAPETOWN.

WRIGHT, LAYMAN & UMNEY, LTD.
SOUTHWARK ————— LONDON, S.E.

Printed for the Proprietors by SPOTTISWOODE & CO. LTD., New-street Square: and Published by the Proprietors at 42 Cannon Street in the City of London. — September 21, 1918

